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VAN DIE REDAKSIE

METABOLISME-REAKSIES OP BESERING

Daar is 'n groot aantal metaboliese veranderings wat op besering volg, en as hulle met juistheid vasgestel word, is die geneesheer in staat om die vloeistofverlies doeltreffend te vergoed en stofwisselings korrek te beheer.[1] Onmiddellik na 'n besering is daar 'n vloeistofverlies uit die binnevaatkompartement, wat dadelik opgevolg word deur 'n terugvloeiing van stof uit die spasies tussen die onbeseerde selle na hierdie kompartement. Presies hoeveel vloeistof verkry word uit die binnesélspasies is egter nog 'n vraagstuk; indien daar wel so 'n beweging van vloeistof is, vind dit betreklik stadig plaas. By pasiënte met ledemaatbeserings mag die verskyning van betekenisvolle hoeveelhede proteïen beteken dat daar 'n wisseling van vloeistof uit die binnesélspasies was, of dat daar 'n stadige diffusie van proteïen uit reserwes plaasgevind het.

'n Ernstige verlies van vloeistof moet so gou doenlik vergoed word. Bloedverlies moet gevolg word deur 'n oortapping, en na brandwonde moet 'n geskikte kolloïed toegedien word. Fisiologies is plasma of oplossings van menslike albumien, tesame met die regte hoeveelheid elektroliete aangewese vir vergoeding, maar dekstan, polyvidone en oxypolygelatine word ook gebruik as plaasvervangers om weer die bloedvolume aan te vul.

Onmiddellik na 'n besering mag die liggaamsmetabolisme verlaag wees, met 'n subnormale koors, maar later is daar 'n groter proteïenafbreuk wat sy hoogtepunt tussen die 4de en die 8ste dag bereik en dan weer tot die normale daal. Die meganismus van hierdie verhoogde katabolisme na 'n besering is onbekend.

Na 'n besering mag die werkverrigting van die niere verstoor wees, en die eerste afwyking is gewoonlik 'n vermindering van urine. Dit mag te wyte wees aan die uitwerking van oorgroot hoeveelhede van die antidiuretiese hormoon, hoewel ander faktore soos verlaagde druk of refleksvernouing van die niervate al baie jare lank beskou word as die oorsake van hierdie primêre waterterughouding. Die liggaam is ook geneig om natrium- en chloried-ione terug te hou, miskien weens die vrystelling van oormatige hoeveelhede van die bynierskorshormoon. Uit die verskyning van stowwe wat nie

EDITORIAL

THE METABOLIC RESPONSE TO TRAUMA

Numerous metabolic changes follow trauma, and their correct assessment enables proper replacement of fluid and management of metabolic alterations to be instituted.[1] There is loss of fluid from the intravascular compartment immediately after trauma, and fluid begins to move almost immediately from the extracellular spaces of undamaged tissue into the intravascular compartment. To what extent fluid is derived from intracellular spaces is a problem that requires more investigation; if this movement of fluid does occur it occurs relatively slowly. The appearance of significant amounts of protein after about 6 hours in patients with limb injuries may indicate the arrival of intracellular fluid or the slow diffusion of protein from reserves.

Acute losses of fluid should be replaced early. Following a haemorrhage blood should be administered, and after burns a suitable colloid fluid should be infused. Plasma or solutions of human albumin are physiologically correct for replacement, together with the correct quantity of electrolytes, but as substitutes dextran, polyvidone, and oxypolygelatin have been used as blood-volume restorers.

Body metabolism may be depressed, with subnormal temperature, immediately after an injury, but later there is increased protein breakdown, which reaches a maximum between the 4th and 8th days, thereafter returning to normal. The mechanism of this increased catabolism after injury is not known.

Renal function may be disturbed after trauma, the earliest change usually being oliguria. This may be due to the action of excessive amounts of the antidiuretic hormone, although other factors such as hypotension or reflex renal vasoconstriction have long been regarded as causes of this primary water retention; sodium and chloride ions also tend to be retained, possibly from the

normaalweg in die urine voorkom nie, kan ons aflei dat daar 'n tyd lank na 'n besering 'n patologiese versteuring in die nierwerking mag wees. Waar daar hewige drukvermindering of niervaatvernouing is, word nierbloedloosheid gevolg deur akute nierfaling met uitgesproke weefselbeskadiging. Gewoonlik word geen urine uitgeskei nie, of anders slegs baie min, wat dan proteïen en silinders en (na 'n verbryselende besering) miskien ook spierhemoglobien bevat.

By die oorweging van voedingsbehoeftes moet ons onthou dat die lewer se werking belemmer mag wees na 'n liggaamsbesering. Dit is nog nie vasgestel presies watter metaboliese rol die harsingslymklier en die byniere na 'n besering speel nie. Ook moet dit nog bevestig word hoe erg die werking van die spysverteringstelsel belemmer word. Navorsers bestee vandag baie aandag aan hierdie probleem en aan die baie ander probleme verbonde aan liggaamstoestande na besering.

Daar is natuurlik baie variasies in die metaboliese reaksies op besering, en hoewel 'n hewige besering oor die algemeen 'n ewe groot reaksie uitlok, is daar tog pasiënte wat kwaai reageer op 'n betreklik ligte besering. Die metabolisme mag ook op sekondêre wyse geaffekteer word deur die gevolge van die besering self, byvoorbeeld deur direkte orgaanbesering, die ontstaan van infeksie in die wond of in die longe, koors, uittering, chirurgiese behandeling, en voortdurende vloeistofverlies uit fistels en brandwonde. Die gevolge van hierdie faktore vererger die algemene metabolisme-reaksie.

Soos Taylor[1] in sy verhandeling oor hierdie onderwerp gesê het, word vloeistofterapie na besering gebruik om nadelige veranderings in die metabolisme te voorkom, om dié wat wel ontwikkel te behandel, en om die genesing van beskadigde weefsel te bevorder. Gedurende die eerste 24 uur is vergoeding vir akute vloeistofverlies 'n dringende saak, want 'n verlaagde bloedvolume mag die dood veroorsaak of die pasiënt blootstel aan onomkeerbare skok of ernstige nieraantasting. Gedurende die tweede fase, wat van 2 tot 5 dae duur, moet die liggaam se behoeftes aan vloeistof, voeding en elektroliete reggestel word; die geneesheer moet hier baie versigtig wees om te verhoed dat water, natrium en urea teruggehou word, en hy moet terselfdertyd toesien dat daar nie 'n *tekort* aan natrium en water ontstaan nie. Indien moontlik moet die kalorie-inname groot wees, sodat die liggaam nie vir energie op sy eie weefsel teer nie. Dit word aangeneem dat 'n groot proteïen-inname onnodig is op hierdie stadium, maar baie hang van die betrokke indiwidu af. As die pasiënt bewusteloos of baie swak is, moet hy deur 'n maagbuis (bv. met melk en glukose) gevoer word, of anders moet die geneesheer gebruik maak van aarvoeding. Hoewel water en elektroliete maklik deur die are gegee kan word, is dit egter moeilik om op hierdie wyse 'n groot kalorie-inname te bewerkstellig. Vrugtesuiker, alkohol en vet-emulsies word dus gebruik. In die derde fase moet die beskadigde weefsels gehelp word om te genees en te herstel, en algemene verliese moet vergoed word. 'n Dieet wat ryk is aan kalorieë, met proteïene, vitamiene en die essensiële minerale, moet voorsien word. Dit is miskien moeilik om te weet wanneer om met so 'n dieet te begin, maar volgens Peters[2] hoe eerder hoe beter. Die pasiënt is miskien

liberation of excessive amounts of adrenocortical hormones. Pathological disturbance of renal function may occur for a time after injury, as indicated by the appearance of abnormal constituents in the urine. With severe hypotension or renal vasoconstriction renal ischaemia is followed by acute renal failure with definite histological lesions; the patient passes no urine, or only a very little with protein and casts, and possibly myohaemoglobin after crushing injuries.

Liver function may be reduced after injury to the body and this must be borne in mind when nutritional requirements are considered. The precise metabolic role of the pituitary and adrenal glands after trauma remains to be established. To what extent gastro-intestinal function is impaired is also a subject that needs further study. These problems and many others in connection with the post-traumatic state are receiving much attention from research workers.

There is obviously much variation in the metabolic response to trauma, and though in general severe trauma should be followed by greater metabolic reaction, in some patients an excessive reaction may occur after moderate trauma. Metabolism may also be affected secondarily to the sequelae of trauma; from direct injury to the organs, the development of infection at the site of injury or in the lungs, fever, inanition, surgical operation, and continuing losses, e.g. from fistulae and burns. These will cause effects superimposed on the general metabolic response.

As stated by Taylor[1] in his review of the subject, fluid therapy is instituted after injury to prevent adverse metabolic changes, to treat those which develop, and to promote healing of damaged tissue. In the first 24 hours replacement of acute fluid loss is dealt with urgently, for depletion of blood volume may cause death or predispose to irreversible shock and acute renal failure. In the second phase, lasting 2-5 days, nutritional, fluid and electrolyte requirements are adjusted, and great care is required to avoid retention of water, sodium and urea, while preventing water and sodium deprivation; a high calorie intake should be ensured if possible, so that body tissue shall not be catabolized to provide energy. High protein intakes are regarded as wasted at this stage, but much will depend on the individual case. If the patient is unconscious or very weak, feeding by means of an intragastric tube (e.g. with milk and glucose) or intravenous therapy must be adopted. But whereas water and electrolyte can readily be administered intravenously a high calorie intake is difficult to provide by this route; fructose, alcohol, and fat emulsions have been used for this purpose. In the third stage repair and regeneration of damaged tissue must be assisted and replacement of general losses must be made good. A high-calorie diet with protein, vitamins and essential minerals should be provided; it may be difficult to know when to start, but according to Peters[2] the sooner the better. The patient

gretig om na normale maaltye terug te keer. 'n Swak pasiënt moet miskien gevoer word en 'n bewustelose een moet proteïenryke voedsel deur 'n maagbuis kry, tesame met 'n genoegsame hoeveelheid vloeistof elke dag.

1. Taylor, W. H. (1955): Amer. J. Clin. Nutr., 3, 181.
2. Peters, J. P. (1944): Fed. Proc., 3, 197.

may be keen to resume normal meals; he may have to be fed if he is weak, and if unconscious a high-protein diet must be given by tube, without neglecting to provide an adequate daily fluid intake as well.

1. Taylor, W. H. (1955): Amer. J. Clin. Nutr., 3, 181.
2. Peters, J. P. (1944): Fed. Proc., 3, 197.

INTERNATIONAL MEDICAL COURTESIES

The South African Council for the Exchange of Medical Sciences has been instrumental in enabling the *Acta Medica Scandinavica* to publish a special South African number (supplement 306 to volume 152, 1955). Under the sponsorship of S.A.C.E.M.S. the special number has been reprinted with the title *Medicine in South Africa* by the Eagle Press, Ltd., P.O. Box 2878, Johannesburg, from whom copies at 10s. 6d. are obtainable.

As an introduction to the South African number the Minister of Health of the Union contributes a message of greeting to all the Scandanavian countries, which, he writes, are renowned throughout the world for the high quality and thoroughness of their medical training and the efficiency of their health and medical services. The Minister says: 'The great medical tradition of international cooperation finds expression . . . in the exchange of ideas in the sphere of medical knowledge and its application to the service of mankind in the field of public health'.

The special number consists entirely of 15 articles by South African authors, as follows: *Development and healing of rickets in intramembranous bone*, by J. M. Bailie and J. T. Irving; *The prediction of pulmonary dead space*, by Margaret R. Becklake and H. I. Goldman; *Treatment of Leprosy*, by A. R. Davison; *Gastroduodenal ulcers and neoplasms*, by J. F. P. Erasmus; *Auto-antibodies and the hyper-reactive state in the pathogenesis of disease*, by James Gear; *Vascular changes in poliomyelitis and the effect of sympathectomy on bone growth*, by R. H. Goetz, J. G. du Toit and B. H. Swart; *Cardiac ventricular aneurysm in South Africa*, by H. D. Jacobs and G. A. Elliott; *The clinical and metabolic effects of massive intestinal resections*, by W. P. U. Jackson and G. C. Linder; *Hibernoma of the adrenal*, by A. Lee McGregor; *The diagnosis of mitral incompetence in the presence of mitral stenosis*, by M. McGregor and M. M. Zion; *The application of high voltage and magnification technique to the diagnosis of pneumoconiosis*, by S. F. Oosthuizen and Eric Samuel; *A case of intrathoracic phaeochromocytoma with hypertension*, by Graham R. McLeish and David Adler; *Ascites*, by P. Theron and J. C. Allan; *Primary amyloidosis in the baboon*, by Joseph Gillman and Christine Gilbert; *Are all cases of pink disease actually 'idiopathic' infantile acrodynia?* by E. Janssen.

The action of this celebrated medical journal constitutes a friendly gesture on the part of the Scandanavian countries towards South Africa, which is all the more welcome because medical research is of recent development in our country, where it is little more than 30 years since medical degrees were first conferred on graduates of our universities. The South African authors who have taken part have worthily represented our country and are to be congratulated on the quality of the articles they have contributed. And congratulations are also extended to S.A.C.E.M.S., who have already organized the publication of South African numbers in medical journals in Italy and France. Action such as this reflects the international solidarity of medical science and is a contribution to world cooperation generally.

VIRUS OF BAKTERIËLE PNEUMONIE?

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Dit is opvallend uit literatuurstudie dat, met die koms van die meer tegniese en laboratorium-wetenskap in die kliniek, die uitgroeiing van superspesialisasie en die groot aantal effektiewe geneesmiddels, minder aandag geskenk word aan die suiwer kliniese beeld as sodanig. Trouens daar is min tyd meer vir waarneem en 'n definitiewe diagnose, want die noodsaaklikheid om die pasiënt so gou as moontlik in sy werk of andersins terug te besorg, die populêre mediese kennis van die publiek, hulle vrees vir 'n ernstige siekbed en die voorskildering van die lekepers oor siektetoestande, maak dit eintlik gebiedend vir die behandelende geneesheer om direk te begin met een of ander geneesmiddel waarop, in 'n groot aantal gevalle, wel beterskap en genesing intree sonder 'n definitiewe diagnose of verdere ondersoek na die oorsaak van die siekte.

'n Ander rede vir die onmiddellike toepassing van een of ander terapie is soms die omslagtigheid om tot 'n laboratorium-diagnostiek te kom, wat dikwels nie alleen tydrowend en kosbaar is nie maar ook onbevredigend. Hierdie faktore geld veral vir die virus-ondersoek wat in baie gevalle, veral in ons land, nie vir elkeen bereikbaar en beskikbaar is nie. So is daar in ons land byvoorbeeld nog net 'n paar virus-laboratoria o.a., dié te Kaapstad en te Johannesburg.

Dit is goed om te weet dat 'n bepaalde virus-ondersoek

nie in elke laboratorium gedoen kan word nie en dat in 'n bepaalde geval hierdie ondersoek soms onbevredigende resultate gee en dan nog soms enige weke nadat die behandelende geneesheer dit eintlik nie meer nodig het nie, deurdat die pasiënt al dood of genees is. Weller[1] skrywe: ‚The limitations of virus isolation procedures are not generally appreciated. Isolation attempts are consuming of time and money; with few exceptions they usually yield negative results in the investigation of the sporadic case. With a few exceptions serological tests provide the most practical method for the laboratory diagnosis of virus infections. Unfortunately only a few of the available serological tests can now be economically run in the average hospital laboratory'.

Na aanleiding van 2 gevalle waar genesing vlot ingetree het na toediening van antibiotika sodat die juiste diagnose van virus of bakteriële pneumonie eintlik nie gemaak kon word nie, en aangesien in beide gevalle ongewone verskynsels voorgekom het, meen ons dat dit leersaam sal wees om dergelike gevalle vir verdere en meer noukeurige laboratorium- en kliniese studie onder die aandag te bring. Ons twyfel nie daaraan dat hulle al baie in die praktyk teëgekom is nie en ons sal gerieflikheidshalwe eers ons huidige kennis oor die viruspneumonie in die herinnering van die leser terugroep.

Die virus-pneumonie word in die literatuur ook primêre atipiese pneumonie, pneumonitis, of akute interstisiële pneumonie genoem. Reeds in 1872 is hierdie longaandoening klinies en patologies-anatomies beskrywe. Ons eerste waardevolle inligting hieroor, gesteun deur Röntgen-beelde, is van die Amerikaanse militêre kampe ontvang, hoewel Gill[2] in Engeland een van die eerstes in Wes-Europa was om weer aandag op die siektebeeld te vestig. Daarna het publikasies uit verskillende dele van die wêreld verskyn, o.a. Gsell en Engel,[3] en Turner.[4] Uit die eerste beskrywings sou 'n mens aflei dat die siektebeeld klinies baie tipies is. Latere beskrywings het enigsins daarvan verskil, sodat ons op grond van eie waarneminge kan sê dat die viruspneumonie simptomatologies 'n bont beeld vertoon.

Die longaandoening kom endemies sowel as sporadies voor, veral onder kinders en jongmense. Dit is nie gekoppel aan een of ander seisoen nie. Die inkubasie kan òf enkele dae òf enkele weke duur. Dit kan geleidelik begin, met algemene malaise al of nie in aansluiting met 'n banale verkoue, maar dit kan ook akuut en sonder enige prodromale verskynsels begin. Die koors kan geleidelik en onreëlmatig maar ook plotseling hoog begin. Daar kan koue rillings wees, afwisselend met warmte-gevoel. Die pols kan normaal, matig versnel of relatief stadig wees. Soms is daar 'n hardnekkige droë hoes met min sputum wat slymig is. Soms kom die sputum eers in 'n latere stadium voor. Geen sputa rufa nie. 'n Enkele keer kan dit 'n strepie bloed en soms ook eosinofiele selle bevat. By uitsondering is 'n hemoptoë beskrywe. In ieder geval bevat die sputum geen mikroorganismes nie, tensy 'n sekondêre infeksie bygekom het. Soms is daar egter so 'n sterk prikkelhoes dat ribbebreuk beskryf is. Daar kan uitgesproke dispnee en sianose wees, maar dit kan ewe goed ontbreek. In sommige gevalle word meningisme waargeneem. Herpes labiales is ongewoon. Die verloop van die siekte is oor die algemeen goedaardig en genesing kan ook sonder behandeling na enige weke intree. In 'n uitsonderlike geval mag die aandoening egter kronies verloop, terwyl daar ook meerdere gevalle beskrywe is met so 'n ernstige en snel verloop dat die dood kan intree. In 1946 het Löffler en Moeschlin[5] 7 gevalle beskrywe waarvan 4 oorlede is. By lykskouing het hulle miliêre bronchopneumoniese haarde gevind met sterk organisasie van die eksudaat waardeur kleinere bronchi afgesluit word (bronchiolotis obliterans).

Eienaardig is die feit by hierdie pneumonie dat daar by ouskultasie en perkussie baie min te vinde is, terwyl daar Röntgenologies uitgesproke afwykinge kan bestaan.

Op die Röntgen-foto is die volgende beelde te onderskei:

1. Aan een of albei kante hilusswelling met 'n waaiervormige en streperige sluiering na ondertoe, wat dikwels vergelyk word met die afsonderlike takkies van 'n besem, en wat op 'n peribronchiale ontstekingsproses berus.
2. Netvormige verdikkinge van een of ander longkwab wat berus op perilobulêre haarde.
3. Klein of groot atelektatiese haarde in die aangetaste longgebiede.
4. Die broncho-vaskulêre skaduwees aan beide kante is intensiewer waar te neem.
5. Soms is daar klein verspreide haardjies wat aan miliêre tuberkulose laat dink.
6. 'n Enkele maal is holtevormende beelde waar te neem.

Terwyl die afwykinge meestal in die onderste gedeeltes van die longe aangetref word, kan hulle ook in die bovelde gevind word, wanneer hulle dan van fibreuse tuberkuleuse haarde onderskei moet word.

LABORATORIUMBEVINDINGE

Die besinkingsnelheid kan normaal tot matig verhoog wees en in ernstige gevalle aansienlik hoog veral ook as daar 'n gesuperponeerde infeksie by is. Die aantal leukosiete in die bloed kan laag, (selfs onder 5,000 per mm.^{3}) tot aansienlik hoog (selfs tot óór 20,000 per mm.^{3}) wees, terwyl daar veral in die herstelperiode Pfeifferagtige selle in die bloed gevind kan word. Daar is vaak limfopenie en in die rekonvalesensie soms 'n limfatiese reaksie. Daar is geen duidelike veranderinge in die aantal eosinofiele selle nie. Die bekende verminderde tafelsout-uitskeiding by die bakteriële pneumonie ontbreek meestal by die virus-pneumonie.

Na die eerste week van die siekte tree daar veelal koue-agglutinines in die serum van die pasiënt op ten opsigte van eie eritrosiete en dié van bloedgroep O. Blykbaar word titers bó $\frac{1}{32}$ tot $\frac{1}{64}$ as positief beskou. Hierdie agglutinines kom ook in normale sera voor, maar in lae titers. In die literatuur word positiewe syfers aangegee van 18·5% (Curnen[6] e.m.w.) tot 80% (Young[7]) van die gevalle. McNeill[8] het daarop gewys dat hierdie agglutinines soms vrywel tydens 'n epidemie kan ontbreek. Daar moet egter onthou word dat koue-agglutinines ook kan voorkom by enkele ander siektes soos slaapsiekte, framboesie en hemolitiese anemie, (Finland[9] e.m.w.). Van der Hoeden en Verbeek[10] het hulle ook aangetoon by hipertrofiese lewersirrose.

Uitslaggewend egter vir die waarde van die koue-agglutinasie-reaksie is die toenemende titer tydens die

verloop van die siekte, wat gedurende die herstelperiode weer afneem. Volgens Gerrits[11] is die koue-agglutinasie-reaksie negatief by die bakteriële pneumonie en sommige virus-infeksies soos masels, kinkhoes, parotites epidemica, influensa en psittacosis.

Antistowwe teen bepaalde streptokokke

Baie werkers het antistowwe in die serum van hulle pasiënte met virus-pneumonie gevind ten opsigte van bepaalde streptokokke. So het byvoorbeeld Finland[9] en medewerkers hierdie antistowwe in 75% van hulle gevalle gevind ten opsigte van die stam ‚ES.' wat hulle self gevind het.

Positiewe reaksie van Wassermann

Hegglin[12] het in die veertigerjare longinfiltrate beskrywe sonder bepaalde diagnose maar waarby 'n positiewe Wassermann-reaksie gevind is sonder dat die persoon aan leus ly. Hierdie infiltrate het 'n goedaardige dog langdurige verloop en met genesing verdwyn die positiewe reaksie vanself. Ook Blom[13] het longinfiltrate sonder bekende oorsaak by kinders beskrywe. In 1944 het Rein en Elsberg[14] positiewe leus-reaksies gevind by 'n groot aantal pasiënte met virus-pneumonie.

Die urine van 'n pasiënt met virus-pneumonie kan eiwit, 'n vermeerderde aantal rooiselle en galkleurstof (urobiline) bevat.

Die patologiese anatomie van die virus-pneumonie

Hier word gevind hemorragiese bronchopneumonie, bronchitis, peribronchitis, bronchiolitis met nekrose en interstisiële ontstekinge soos perilobulêre en perialveolêre infiltrate. Hierdie interstisiële ontstekingshaarde beheers die beeld en bestaan in hoofsaak uit mononuklêre selle in teenstelling tot die polinuklêre selle by die bakteriële pneumonie.

Komplikasies van die virus-pneumonie

Hierby behoort epistaksis, hematurie, eriteem, poliartritis, meningisme, miokarditis, waarby in 3·3% van die gevalle veranderinge in die RS-T segment van die elektrokardiogram voorkom. Pleuritis met gelerige eksudaat en met baie mononuklêre selle soos by die tuberkuleuse pleuritis voorkom, atelektase en interlobêre pleuritis.

BESKRYWING VAN EIE GEVALLE

Geval 1. 'n Jong blanke vlieënier was behulpsaam met bestryding van tsetse vlieë in Suid-Rhodesië deur bestuiwing met een of ander insektiside. Op 'n warm dag het hy abnormaal baie koeldranke gedrink. Die volgende dag word hy siek met plotselinge hoë koors, geweldige hoofpyn asook pyne deur sy hele liggaam. Baie gesweet. Geen opvallende hoes nie maar wel het hy pyn in die bors gehad en was benoud. Enige ure later was die diagnose by hom gestel op pneumonie en ontvang hy groot dosisse penicillin. Na 24 uur was sy toestand onveranderd en word hy na Pretoria gebring. Temperatuur 104°F. Pols 100 per minuut. By ondersoek vind ons 'n ernstig siek pasiënt, met die keel en neusslymvlies baie rooi. Daar bestaan geen prikkelhoes nie. Die simptoom van Kernig was swak positief. Aan hart en longe en ander inwendige organe kon geen afwykinge gevind word nie. Daar was geen algemene limfklierswellinge nie. Die urine het alleen 'n spoor eiwit en vermeerderde urobiline bevat. Tensie normaal. Die bloedbeeld was as volg: Hb 105% (=16·7 g.%), rooiselle 5,710,000 per mm³, witselle 15,200 per mm³. Differensiële telling: eos. 4%, segment 55%, limf. 35%, mon. 15%. Türckse selle 1%, en af en toe 'n atipiese limfosiet.

Nadat die voor die handliggende siektes soos malaria, tripanosomiasis en piëlitis met waarskynlikheid uitgesluit was, het ons deur die erns van die toestand oorgegaan tot behandeling met tetracyn met die oog op 'n akute longproses, hetsy bakterieël hetsy virus van oorsprong, temeer omdat die maak van 'n longfoto onder omstandighede onuitvoerbaar was. Twaalf uur na toediening van tetracyn was pasiënt aansienlik beter en gedurende die 3 daaropvolgende dae het hy hom so goed as gesond gevoel. Enige dae later was hy gemobiliseer en ontslaan en het geen terugslag gehad nie. Die 4de dag na begin van sy siekte was daar geen afwykinge op die longfotos te sien nie. Uit die aard van die saak bly die etiologie hier onbekend. Dit is minder waarskynlik dat genesing so plotseling sou ingetree het sonder enige terapie. Vir 'n bakteriële causa pleit die aantal leukosiete, hoewel v. d. Merwe[15] aangetoon het, aan die hand van 700 normale blankes in Suid-Afrika, dat 15,210 by uitsondering nog by 'n volkome normale (klinies altans) persoon aantoonbaar kan wees. Aan die anderkant pleit die ontbreking van 'n linkse verskuiwing in die differensiële bloedbeeld daarteen, asook die relatiewe bradikardie. Dit sou ook moontlik wees om 'n diagnose van virus-infeksie (pneumonie?) te maak in hierdie geval as die bogeskilderde simptomatologie in aanmerking geneem word.

Van belang is egter dat die tetracyn in die gebruiklike dosis so onmiddellik gehelp het afgesien of die verwekker 'n virus of 'n bakterie was. Vermoedelik sal ons in die toekoms die gevalle juister kan diagnoseer as 'n vroeë en betroubare laboratoriumdiagnostiek moontlik is.

Geval 2. 'n Blanke man van 30 jaar uit Suid-Rhodesië waar malaria en slaapsiekte heers, was volkome gesond tot ongeveer 6 weke voor opname op 20 Januarie 1955 toe hy 'n swaar verkoue gekry het, d.w.s. 'n lopende neus, pyne deur sy hele liggaam en ook hoofpyn. Geen hoes nie. Na 'n week was hy beter hoewel nog steeds met 'n pyn tussen die oë waar dit drukpynlik was.

Op 20 Januarie begin alleen sy bene moeg te voel. Hoewel dit 'n warm dag was het hy koud gekry en mislik begin voel. Later in die dag voel hy hom algemeen siek en besonder lam en moeg in die bene. Koue rillings afwisselend met warmte-gevoel. Geen hoofpyn, mislikheid, benoudheid, hoes of hoesprikkel, pyn in die bors, pyn in die nek of in die bene nie. Vir enige ure het hy hom beter gevoel totdat hy saans om 9 uur koue rillings kry met mislikheid en enigsins verward raak. Om 1 uur middernag word hy opgeneem in die hospitaal. By ondersoek vind ons 'n goedgeboude man, enigsins verward, rooi in die gesig, met koors 104°F. en pols 152 per minuut. Daar bestaan ligte nekstyfheid. Asemhaling 32 per minuut, maar geen sianose, benoudheid of hoes nie. Tong ietwat beslaan met geen fibrillêre kontraksies nie. Nieteenstaande spesiale aandag aan die longe kon fisies geen afwykinge vasgestel word nie. Harttone suiwer en ritme reëlmatig. Lewer, milt en limfkliere nie vergroot nie. In buik geen afwykinge te vind nie. Urogenitaal-apparaat normaal. Reflekse lewendig maar geen patologiese refleksie nie. Bloeddruk 150-90. Urine normaal. Pasiënt kla steeds oor pyn deur die hele liggaam, hoofpyn en 'n lam gevoel in die bene.

Daar was onder omstandighede enkele siektes wat dringend uitgesluit moes gewees het, met name malaria, slaapsiekte, nierbekkenontsteking, poliomyelitis; die eerste twee o.a. vanweë die herkoms van die pasiënt en laasgenoemde omdat kinderverlamming juis op hierdie tydstip in ons land groot afmetinge aangeneem het. Deur middel van bloed- en serobrospinaalvloeistofondersoek was hierdie aandoeninge, asook meningitis, onwaarskynlik gemaak. 'n Bloedkweek was steriel. Morfologiese bloedondersoek as volg: Hb 122% (=17·7 g.%), rooiselle 5,960,000 per mm³, leukosiete 28,000 per mm³. Differensiële bloedbeeld: Miëlosiete 1%, segmentkernige 84%, limfosiete 9%, monosiete 6%. Die volgende dag was die toestand nog dieselfde en nog was daar geen hoes en sputum nie. Die siekte-duur was nog te kort vir bepaling van koue-agglutinasie reaksie. Met die oog op die erns van die toestand, die anamnese, die afwesigheid van genoemde siektes en van hoes, word die toestand verdenk as 'n moontlike virus-pneumonie met 'n moontlike sekondêre infeksie. Erythrocin word toegedien as volg: 5 tablette van 200 mg. stuk ineens en daarna vir die eerste 12 uur 2 tablette elke 4 uur. Na 12 uur behandeling was daar tekens van beterskap en het die temperatuur begin daal. Vir die daaropvolgende 2×24 uur elke 6 uur 2 tablette en vir die daaropvolgende 2×24 uur elke 6 uur 1 tablet. Die temperatuurverloop is duidelik uit die bygaande koorskaart (Fig. 1). Daarna was vir 3 agtereenvolgende dae driemaal per dag 1 tablet toegedien.

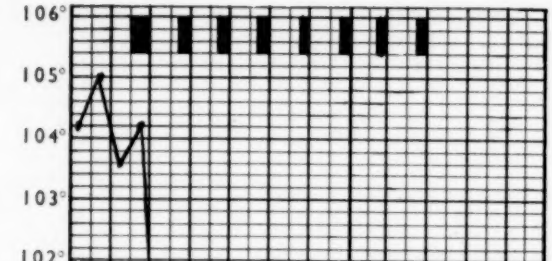

Fig. 1. Koorskaart. Die syfers onderaan verwys na die opeenvolgende dae van die siekte. Die swart blokkies bó verwys na erythrocin-dosisse.

Die Röntgen-foto van 22 Januarie (Fig. 2), dus 24 uur na instelling van die terapie, het 'n duidelike konsolidasie van die regter-bokwab en gedeelte van die middel-kwab aangetoon waarmee die diagnose van 'n bakteriële pneumonie Röntgenologies vrywel vasstaan. Drie dae nadat die koors normaal was, was pasiënt binnenshuis gemobiliseer; daarna was hy heeltemal goed en kon ontslaan word. Hy het geen terugval gehad nie.

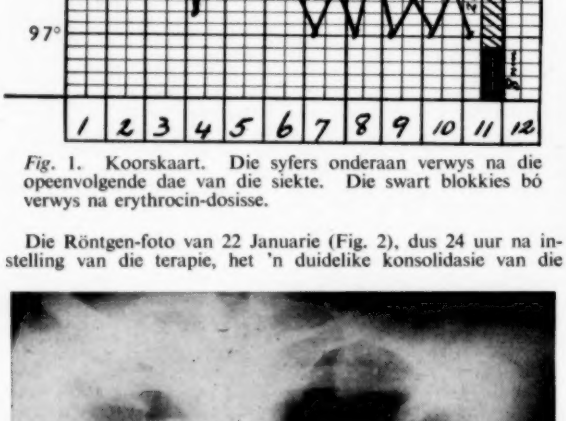

Fig. 2.

Een week na aanvang van die siekte was die bloedbeeld volkome normaal. Tien dae na begin van sy siekte was die koue-agglutinasie titer +2, die komplimentbinding-reaksie t.o.v. Rickettsia negatief, geen Coxsackie-virus was gevind in die ontlasting nie en besinkingsnelheid 8 mm. na 1 uur en 26 mm. na 2 uur. 'n Longfoto (Fig. 3) 5 dae na die eerste het nog klein reste van die konsolidasie met interlobêre pleuraverdikking aangetoon.

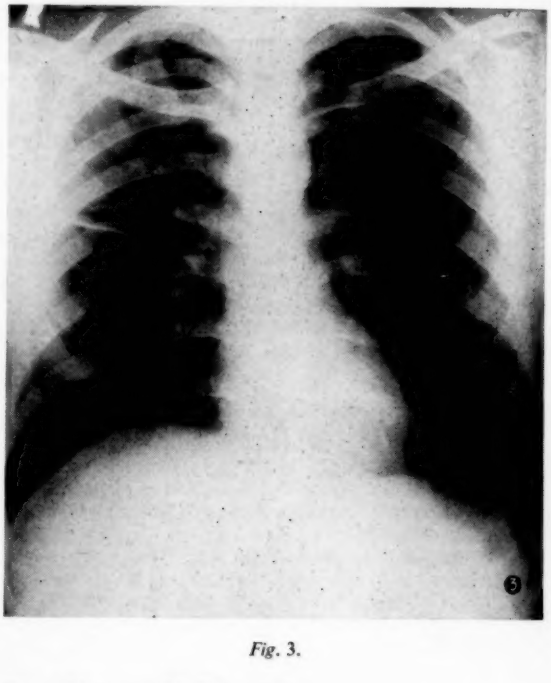

Fig. 3.

Bespreking van hierdie geval

Die anamnese van 'n voorafgaande verkoue met volkome afwesigheid van hoes met geen duidelike fisiese bevindinge aan die longe, pleit onder omstandighede in hierdie geval vir die kliniese diagnose van 'n virus-pneumonie, terwyl die bloed- en Röntgenbeelde daarteen pleit en 'n bakteriële pneumonie waarskynlik maak. Die moontlikheid bestaan ook dat dit wel aanvanklik 'n virusinfeksie van die long was waarby baie vroeg 'n sekondêre infeksie bygekom het. 'n Allergiese toestand skyn uit hoofde van die feit dat die pasiënt so snel reageer het op nie-allergiese behandeling, uitgeslote te wees.

Indien die diagnose tog 'n bakteriële pneumonie moet lui waarvoor ons geen bewys het nie, dan beskou ons hierdie geval baie leersaam om op rekord te plaas, omdat dit dan 'n bakteriële pneumonie sou wees sonder hoes of sputum, waarvoor daar spesiaal opgelet was en waarby geen duidelike fisiese verskynsels van konsolidasie van een hele kwab gevind kon word nie.

Dit is uit die aard van die saak moeilik om uit die negatiewe koue-agglutinasie reaksie 'n virus-pneumonie uit te sluit, omdat genesing reeds ingetree het op so 'n

vroeë tydstip waarin die koue-agglutinines nog nie gevorm het nie. Dit is twyfelagtig of ons die diagnose van virus-pneumonie kan verwerp as die infiltrate in die long binne 'n arbitrêre periode, van sê 'n week, verdwyn. Dit is immers moontlik dat daar virussoorte is, nog onbekend, wat moontlik net so gevoelig kan wees teen een of ander antibiotikum en waarvan ons ook oor die algemeen nog nie baie weet nie, waardeur 'n virus-pneumonie dus ook binne enkele dae, net soos die bakteriële pneumonie, prakties kan verdwyn.

Professor Mulder van die Leidse Universiteit het reeds in 1947 die aandag daarop gevestig dat 'n sekondêre bakteriële infeksie dikwels op bodem van 'n virus-pneumonie kan optree en selfs ernstige afmetings kan aanneem. Volgens hom sou hierdie sekondêre infeksie vanaf die eerste dag tot 'n week na die begin van die primêre virus-infeksie kan optree.

VIRUS-PNEUMONIE OF NIE?

Hierdie diagnose word vaak ten onregte en oorhaastig gemaak sonder om aan die vereistes van so 'n diagnose te voldoen, hoe bont die beeld klinies en hoe moeilik die laboratoriumbevestiging ook mag wees. Dit het 'n gemaklikheidsdiagnose geword, miskien ten dele onder invloed van die merkbare neiging in ons huidige mediese denke om soms 'n bepaalde term te gebruik waarmee ons onsself wysmaak dat dit genoegsaam bewys is vir 'n diagnose, waarmee ons onsself dan 'n massa werk en moeite bespaar om verder te soek na 'n korrekte diagnose, en sodoende die pasiënte dikwels gemaklik tevrede kan stel omdat hulle reeds deur die lekepers en populêre voordragte virus- en andersins bewus gemaak is.

Met die oog op ons huidige gebrekkige kennis van virus-infeksies, en veral omdat genesing so gou kan intree met ons huidige medikamenteuse terapie voordat 'n observasie-tydperk moontlik is, moet die diagnose voorlopig *per exclusionem* gestel word en dan hoofsaaklik op kliniese (o.a. ten Berg[16]) en Röntgenologiese (?) gronde.

Vir die maak van 'n virusdiagnose, deur middel van die laboratorium, stel Weller[1] 4 ondersoekmetodes daar te wete:

(*a*) isolasie van die verwekker,

(*b*) die nagaan van 'n stygende titer van die spesifieke antiliggame in die verloop van die siekte,

(*c*) die aantoon van 'n stygende titer van een van 'n klein groepie van nie-spesifieke antiliggame en

(*d*) die aantoon van karakteristieke sitologiese veranderinge in biopsie- en uitstrykpreparate.

Volgens Watson[17] is die diagnose van virus-pneumonie ‚streng gesproke' gereserveer vir die gevalle waarby 'n koue-agglutinasie in die serum aanwesig is. Dat hierdie kriterium te eng gestel is, blyk uit bogemelde literatuur-aanhalings.

Daar sal steeds meer bepaalde virus-verwekkers uitgeskakel moet word soos dié van Q-koors (*Rickettsia Burneti*), influensa (3 soorte), en psittacosis respektiewelik ornithosis.

En as hierdie spesifieke virusverwekker nie gevind word nie en daar word ook geen bakteriële verwekker gevind nie, sou ons dan mag praat van allergie en 'n virus bv. heeltemal uitsluit? Dit bly dus daarom noodsaaklik dat ons die kliniek van die betrokke geval voorlopig nog as sluitsteen moet gebruik om uit ons moeilikhede te kom tot tyd en wyl die laboratorium ons 'n besliste antwoord kan bring.

Andrews[18] maak dit blykbaar nog moeiliker wanneer hy 'n ‚siekte' beskrywe (*febrile catarrh*) en wat in Amerika ‚acute undifferentiated upper respiratory disease—A.R.D.' genoem word. Volgens hom sou sy siektebeeld op 'n influensa, maar ook op virus-pneumonie, kan gelyk. Hy laat hom as volg uit: ‚Influenza can be definitely diagnosed by means of laboratory tests. Febrile catarrhs have tended to consist of what remains and is not 'flu', something not precisely diagnosable. They comprise the numerous cases of exsudative tonsilitis and which are not due to streptococci and they also grade into primary atypical pneumonia.' Hierdie mening dui aan hoe naby die virus-pneumonie nog aan die kategorie van siektebeelde ‚not precisely diagnosable' kan staan.

In die differensiële diagnostiek van virus-pneumonie kom nog verder die volgende aandoeninge voor:

1. Skimmel- en ander spesifieke infeksies;

2. Vlugtige infiltrate by kinders en volwassenes sonder bekende oorsaak met al of nie eosinofilie. Hierdie infiltrate van vroeër word oor die algemeen vandag as allergiese haarde beskou, onder andere op grond daarvan dat hulle op anti-allergiese behandeling sou verdwyn;

3. 'n Enkele maal die rumatiese pneumonie wat in 3 vorms ingedeel kan word volgens Griffith[19] e.m.w., te wete: (*a*) primêre akute rumatiese pneumonie waarby koors, hoes, dispnee en longafwykinge gevind word voordat gewrigsverskynsels voorkom; (*b*) die sekondêre akute rumatiese pneumonie met longafwykinge tydens die gewrigsverskynsels en (*c*) sub-kliniese rumatiese pneumonie waarby longinfiltrate, soms vlugtig sonder kliniese verskynsels, tydens die verloop van die poliartritis voorkom.

4. Die aandag van die leser word nog gevestig op 'n goedgedokumenteerde artikel van Smithburn[20] e.m.w. waarin hulle Rift Valley-koors by laboratorium-infeksies van die mens beskrywe. In skaapboerderystreke sal dit verstandig wees om ook aan hierdie siekte te dink wanneer die moontlikheid van 'n virus-pneumonie oorweeg word. By Rift Valley-koors is daar egter tot dusver nog nie longinfiltrate by die mens beskrywe nie.

Ten slotte moet onthou word dat die virus-pneumonie saam met 'n ander siekte kan voorkom en ook 'n latente proses kan laat opvlam.

OPSOMMING

Die kliniese beeld en laboratoriumdiagnostiek van virus-pneumonie word saamgevat.

Twee gevalle word vermeld waarby die diagnose, virus- of bakteriële pneumonie, nie met sekerheid gestel kon word nie en wat vlot en gou genees het met antibiotika.

Die moeilikhede in verband met die stel van die diag-

nose virus-pneumonie word bespreek, asook die differensiële diagnostiek daarvan.

SUMMARY

The clinical picture and laboratory diagnosis of virus pneumonia are briefly mentioned.

Two cases are reported which presented difficulties in differentiating between virus or bacterial pneumonia and which responded promptly to antibiotics.

The difficulties in diagnosing virus pneumonia and the differential diagnosis are discussed.

Ek bedank dr. W. Waks, Superintendent van die Pretoria-hospitaal vir toestemming om die hospitaal dokumente te gebruik vir publikasie van geval 2, asook dr. T. Dunston, patoloog te retoria, vir sy hulp met die laboratoriumondersoeke.

VERWYSINGS

1. Weller, T. H. (1953): S. Afr. T. Geneesk., **27,** 705.
2. Gill, A. M. (1938): Brit. Med. J., **1,** 504.
3. Gsell, O. en Engel, M. (1942): Schweiz. med. Wschr., **72,** 35.
4. Turner, R. W. D. (1945): Lancet, **1,** 493.
5. Löffler, W. en Moeschlin, S. (1946): Schweiz. med. Wschr., **76,** 815.
6. Curnen, E. C. e.m.w. (1945): J. Clin. Invest., **24,** 209.
7. Young, L. E. (1946): Amer. J. Med. Sci., **23,** 211.
8. McNeill, C. (1945): *Ibid.*, **48,** 209.
9. Finland, M. e.m.w. (1945): J. Clin. Invest., **24,** 451.
10. v. d. Hoeden, J. en Verbeek, A. G. M. (1931): Ned. T. Geneesk., **3,** 4767.
11. Gerrits, J. G. (1949): *Ibid.*, **11,** 1210.
12. Hegglin, R. (1945): J. Amer. Med. Assoc., **129,** 150.
13. Blom, P. S. (1945): Ned. T. Geneesk., p. 377.
14. Rein, C. R. en Elsberg, E. S. (1944): Amer. J. Clin. Path., **14,** 461.
15. v. d. Merwe, C. F. (1948): S. Afr. T. Geneesk., **22,** 482.
16. ten Berg, J. A. (1952): Ned. T. Geneesk., **1,** 650.
17. Watson, G. I. (1954): Practitioner, **173,** 578.
18. Andrews, C. H. (1955): S. Afr. T. Geneesk., **29,** 3.
19. Griffith, E. C. e.m.w. (1946): Amer. J. Med. Sci., **22,** 212.
20. Smithburn, K. C. e.m.w. (1949): J. Immunol., **62,** 213.

A TUBERCULIN SURVEY IN SOUTH WEST AFRICA, 1954

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The prevalence of pulmonary tuberculosis amongst South West African Natives is believed to be low but owing to the unreliability of mortality and morbidity rates this belief may not be justified.[1] As a result of discussions between the Union Health Department and the South West African Administration on this subject, it was decided to launch a 'pilot' tuberculin survey in South West Africa. The object of the survey was to determine, within the limitations of the tuberculin test, how many individuals had previously been infected with tuberculosis.

PEOPLE AND AREA SURVEYED

Sopulation. The census of 1951 [2] gives the population of *d*outh West Africa as follows:

Europeans	48,588
Asiatics	3
Natives and Coloured	366,010
Total	414,601

The Native people of this teritory are divided into the following 6 main groups[3]: (*a*) The Bergdamara (Klip Kaffirs), are of negroid origin and live in the central regions. (*b*) The Bushmen live mainly in the north. (*c*) The Hottentots live in the southern parts. (*d*) The Herero (Bantu) are pastoralists, believed to have come into the territory from Central Africa. (*e*) The Ovambo (Bantu) occupy the northerly section of the land and form the principal labour supply for South West Africa. (*f*) The Bastards, descendants of a cross between European and Hottentot, live in a mountain district 70 miles from Windhoek. These different peoples, with the exception of the Bushmen, were all encountered in the areas surveyed.

Territory. Lawrence Green[4] has described South West Africa as a 'sandwich country, a wide prairie shut in by the Namib desert on the West and the Kalahari on the east'. In area it covers more than 320,000 square miles and consists mainly of a large plateau sloping gradually from north to south, with a mean average height of 2,600 ft. above sea level[3]. The territory lies largely within the tropical zone but inland although temperatures are high the absence of humidity and the altitude combine to make the climate bearable. It is a land without flowing rivers and it is considered doubtful whether as much as one-fifth of the territory can support human life [4] (see Fig. 1).

To cover this vast country in a few weeks was impossible, and it was therefore decided to test the more densely populated centres of the south, coastal and central regions. The nothern districts with their scattered Native reserves were omitted because of their inaccessibility and sparsity of population. It is hoped that in future surveys these areas will be included. It was agreed that the municipalities of Karasburg and Keetmanshoop would constitute the southern area, Walvis Bay and Swakopmund the coast, and Windhoek and Rehoboth the central portion (Fig. 1). These areas, excluding the Native Reserves, were considered to be sufficiently representative of the country as a whole.

METHOD AND PROCEDURE

The method of approach in this survey was to try, as far as possible, to tuberculin-test (*a*) the entire school population and (*b*) random samples of complete family groups in the different municipal locations under discussion. The latter (*b*) proved ineffective because the breadwinners in each family group were at work in the neighbouring towns, and it was abandoned. The school

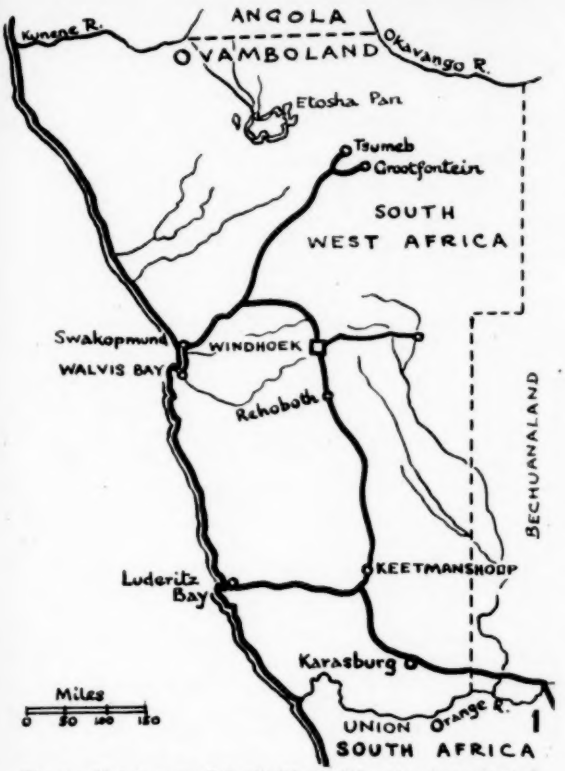


Fig. 1. Sketch map of South West Africa showing principal centres tested.

children on the other hand presented little difficulty; it was a comparatively simple matter to assemble and test them at school, and nearly every scholar in all centres was tested, exept at Windhoek, the capital, where the time available sufficed only for the testing of the largest schools. All adults who voluntarily appeared were also tested. As an inducement to volunteer, adults in certain centres were issued with a free ration of Native beer. At Karasburg, owing to the energies of the municipal department, all Native labour, domestic and other, was halted and the individuals requested to report for testing at the location. The coverage at this particular town was therefore excellent.

The same tuberculin-testing methods were used throughout the survey, and the Mantoux 10 T.U. tuberculin test used for all ages. Fresh dilutions of PPD (Purified Protein Derivative, British Ministry of Agriculture: 10 T.U.= ·0002 mg. PPD) were made daily. The test consisted in the giving of an intradermal injection of 0·1 c.c. of PPD into the middle third of the flexor surface of the forearm. (The main points to be considered when doing the tuberculin test were discussed in a previous report[5].) Reactions were read 3 days after the tests were made and were not classified as simply 'positive' and 'negative', but the size of the induration was carefully measured and recorded. There is difference of opinion to-day as to what constitutes a positive reaction. In this survey it was taken to mean an area of induration the transverse diameter of which measured 6 mm. or more. It has been stressed by Palmer and Edwards[6] that no two persons read the same reaction exactly alike. However, throughout the whole programme uniform test methods were used and the tuberculin-testing and reading performed by the same individual. The results were noted on separate forms giving the name, age, race and sex of all those completing the test, i.e. returning in 3 days for the size of the reaction to be read.

RESULTS AND OBSERVATIONS

1. *Population Tuberculin-Tested*

In Table I is shown, for Natives and Coloured respectively, the total population of the 6 principal towns constituting the 3 geographical areas in the survey, and the number (and percentage) tuberculin-tested. Estimates have been computed by the magistrates in those localities for which there are no official figures[1].

Separate population figures for children of school-going age were not obtainable and therefore this group is not shown separately in Table I, but is included with the general population. Except the children who were absent from school when the tests were carried out, all school children in the towns visited were tested. Two groups of adult Native males—(1) prisoners in the Windhoek gaol, (2) employees working in the largest canning factories at Walvis Bay—were also tested, but as these groups, numbering 654 individuals, consisted of representatives from all parts of the territory they are not tabulated in Table I. At Karasburg a large proportion of the general population was tested, but in the other towns the proportion tested was lower.

As a high proportion of the school population was tested the question of selection in this group is of little significance. For the adults and infants tested the findings must be treated with caution, since the tuberculin results may not be truly representative for the entire community.

2. *Tuberculin Sensitivity*

The figures for the different geographical regions were tabulated according to age (in 5-year age-groups) and race (Tables II-VI). Ages had to be guessed in many instances. The sexes are not shown separately (there is little difference between the sensitivity levels of the two sexes). The sensitivity levels of the different regions are shown in Fig. 2, with separate curves for Natives and Coloured school children.

The levels of positive reactions increase progressively with age and show certain distinct features: (1) The over-all level of reactions is higher throughout the survey for the Native group than for the Coloureds. As compared with the European school children in Windhoek, in whom there is a very low prevalence of positive reactors with the maximum limit rising just above the 10% level, the contrast is still greater (Table IV and Fig. 2). (2) The levels in the coastal regions are higher than those in the two inland regions, viz. the central and southern areas. In the age-group 5-9 years (Table II), 57·3% of the Native children tested in the

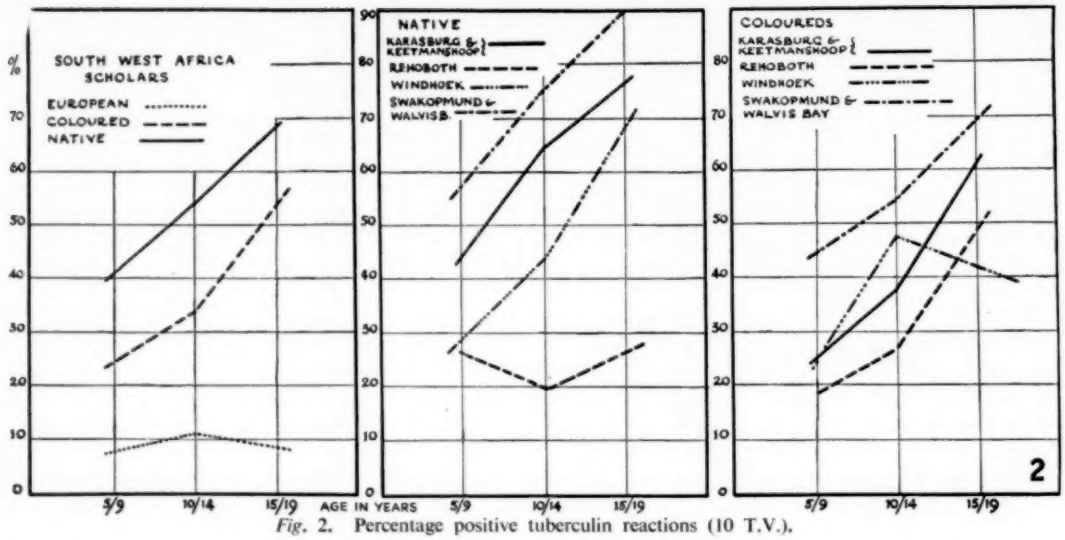
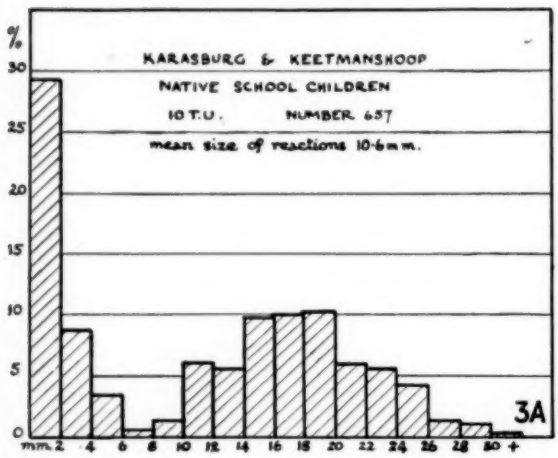
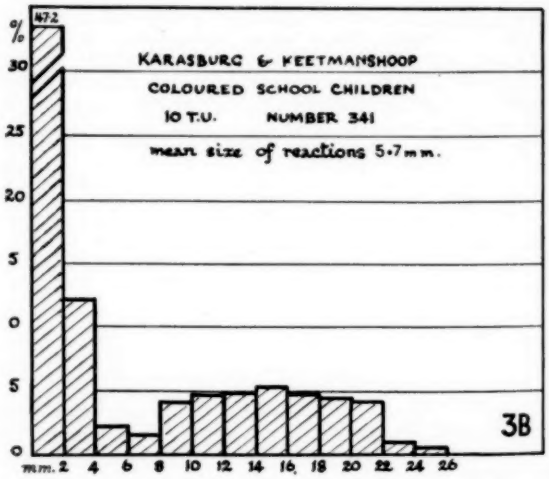


Fig. 2. Percentage positive tuberculin reactions (10 T.V.).

coastal area were positive, 44·1% in the southern area, and at Rehoboth and Windhoek, constituting the central area, 25% and 28·7% respectively. During the final years of their school life (age group 15-19 years) 89·6% of Native children at the coast and 76·6% in the south were positive reactors, while in the central region this figure was 67·9% at Windhoek and only 26·2% at Rehoboth. The numbers examined are sufficiently large to make the differences statistically significant. The Coloured school children (Table III) also present the same noticeable difference. In the age-group 5-9 years at the coast 44·7% positive results were recorded, compared with 24·7% in the south and 24·2% and 18·5% in Windhoek and Rehoboth respectively. The Coloured children of school-leaving age show over 69·1% of positive reactors at the coast, 61·6% in the south, and 41·7% and 48·7% at Windhoek and Rehoboth.

If the results are computed according to the size of the Mantoux reactions (after Palmer and Edwards [6]) and not in terms of positive reactors we again find certain marked variations in the different race-groups (Fig. 3.) The histograms show that common to all race-groups there is a bimodal distribution of reactions in the school children; they either show no reaction or a fairly large area of induration. Once more there appears to be a distinct geographical distribution of tuberculin sensitivity in the areas surveyed. In the south and more especially at the coast there are a large number of children who exhibit what Palmer has called 'high-grade' tuberculin sensitivity, viz. they show fairly strong reactions to a weak dose of tuberculin. The prevalence of these large reactions appears to be lower in the central towns, and in Rehoboth the number of children who show severe reactions is very low. This is even more evident in the





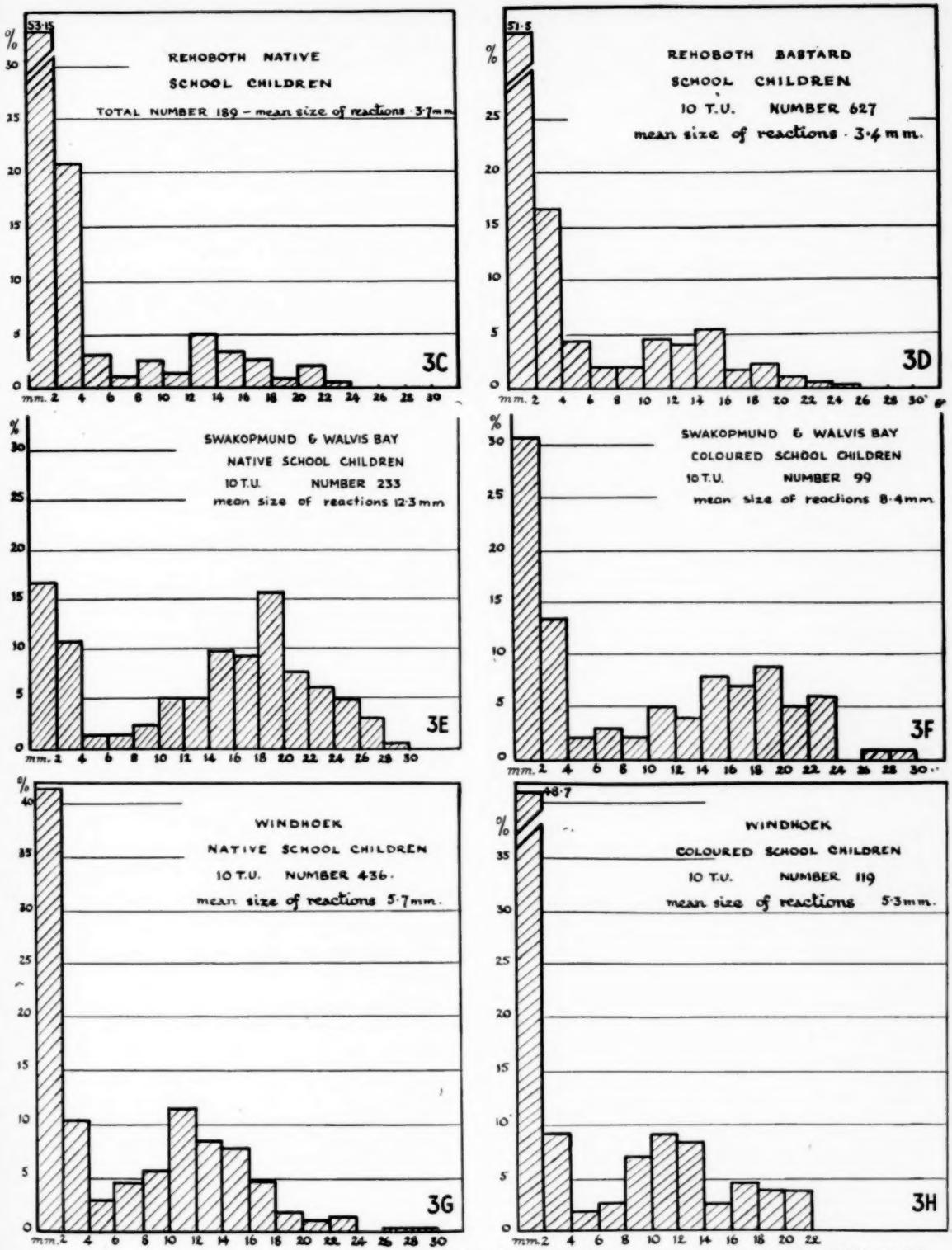
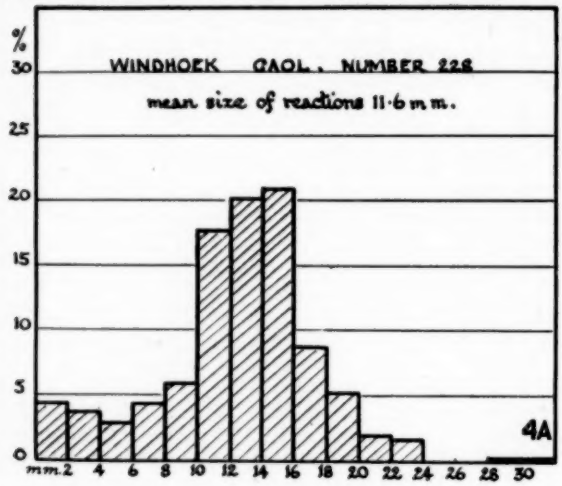


Fig. 3. Eight histograms showing percentage distribution by size of induration of tuberculin reactions (10 T.U.) among non-European school children.

European histogram (Fig. 5); very few European children show any reaction at all.

The adults (Native and Coloured) who were tested show in most centres a percentage positive rate of between 70% and 90% (Table VI). In Windhoek and



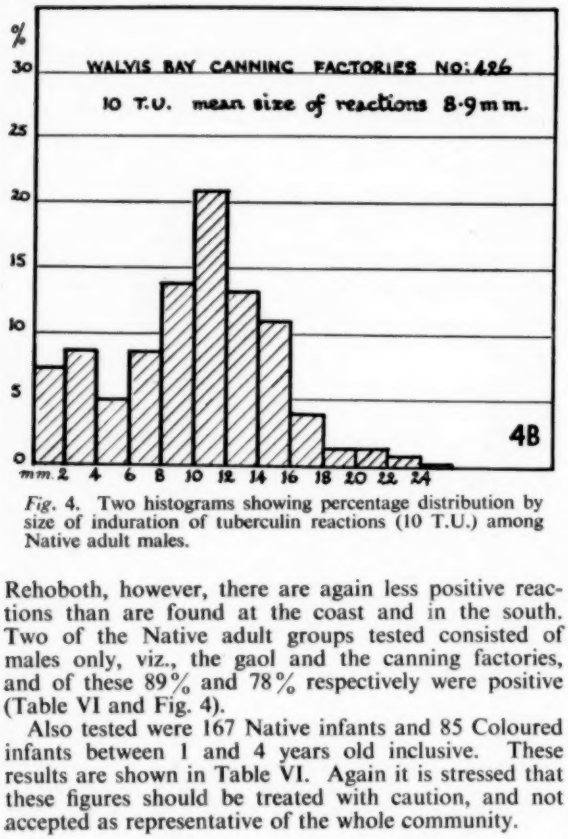


Fig. 4. Two histograms showing percentage distribution by size of induration of tuberculin reactions (10 T.U.) among Native adult males.

Rehoboth, however, there are again less positive reactions than are found at the coast and in the south. Two of the Native adult groups tested consisted of males only, viz., the gaol and the canning factories, and of these 89% and 78% respectively were positive (Table VI and Fig. 4).

Also tested were 167 Native infants and 85 Coloured infants between 1 and 4 years old inclusive. These results are shown in Table VI. Again it is stressed that these figures should be treated with caution, and not accepted as representative of the whole community.

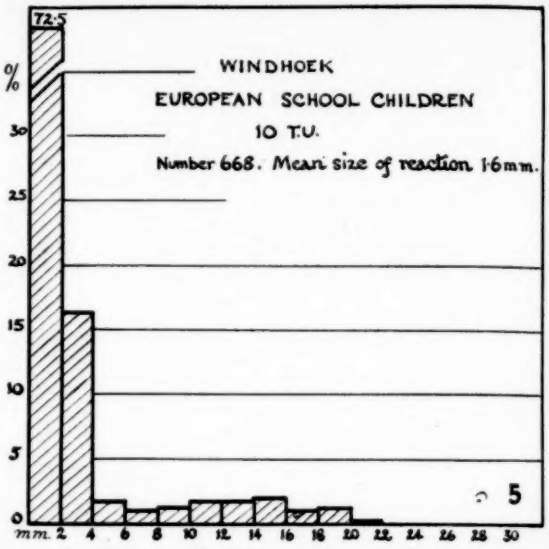


Fig. 5. Histogram showing percentage distribution by size of induration of tuberculin reactions (10 T.U.) among Windhoek European schoolchildren.

INCIDENCE OF BOVINE TUBERCULOSIS

The facts available indicate that tuberculosis in cattle is extremely rare in this territory. Since 1929 approximately 40 cases have been found in South West Africa[7]. The affected animals originally came from the Cape Province, where the original infection was acquired. No secondary cases were found on the farms where the cattle were destroyed. During the period December 1952 to December 1953, 14,739 head of cattle were slaughtered in the Windhoek area and no case of tuberculosis was found[8]. Neethling[7] states (1954) that 'tuberculosis is practically non-existent at the moment amongst animals in South West Africa'.

COMMENTS

A tuberculin survey is particularly useful in comparing different types of community and their different age groups; and in determining the prevalence of tuberculosis in a given group. Davies[9] stressed the fact that an accurate reflection of the true tuberculosis rate in any given area could be obtained by evaluating the exact incidence of tuberculosis infection among an elementary school population; the school children tested on this survey have been judged to be representative of the communities in each area surveyed. Although few European children were tested, those that completed the tuberculin test in Windhoek showed a very low level of positive reactions. This perhaps confirms the generally held impression that the number of Europeans suffering from tuberculosis in this territory is very low[1].

The level for the coloured is lower than that for the Natives at all centres. The Coloured people in the territory appear to live on a higher social level than the Natives. Their communities live apart from the loca-

TABLE I. NON-EUROPEAN PERSONS TUBERCULIN TESTED IN COMPARISON WITH TOTAL POPULATION (1953 S.W.A. CENSUS)

NATIVES

	Karasburg	*Keetmanshoop*	*Swakopmund*	*Walvis Bay*	*Windhoek*	*Rehoboth*	*Total*
Native Population ..	775	2,003	1,138	1,330	8,335	514	14,095
Number Tested ..	713	498	170	261*	541†	279	2,462
% Tested	92·1%	24·4%	14·9%	20·0%	6·35%	54·2%	17·4%

COLOURED

	Karasburg	*Keetmanshoop*	*Swakopmund*	*Walvis Bay*	*Windhoek*	*Rehoboth*	*Total*
Coloured Population ..	235	812	54	450	438	1,582	3,571
Number Tested ..	253	256	44	153	129	686	1,521
% Tested	107·6%	31·5%	81·5%	34·0%	29·4%	43·3%	42·5%

* Excluding 426 Native males from canning factories. † Excluding 228 Native males from gaol.

tions, they mainly attend separate schools and where possible do the skilled work of the towns. Poverty, malnutrition and poor housing are closely allied to the incidence of tuberculosis, and in areas where these conditions prevail, the infectious case of tuberculosis has the opportunity of infecting large numbers of people by close contact. In this territory the Native locations are overcrowded and the housing and sanitation extremely poor; and this is reflected in the Native tuberculosis sensitivity figures. The town of Rehoboth with its Bastard community is, on the other hand, widely scattered and houses generally conform to a European standard. Here the sensitivity curves show a level of positive reactions very much lower than other areas and not very much higher than those for the European school children tested.

In view of the absence of bovine tuberculosis it may be assumed that very few, if any, individuals who show tuberculin sensitivity were infected by the bovine strain of the tubercle bacillus. According to Palmer and Edwards[6] 'high-grade tuberculin sensitivity should be found wherever human tuberculosis is found, and variations in the proportion of children with this kind of sensitivity ought to correspond roughly with variations in the prevalence of the disease'. Can one then assume that there is 'more' tuberculosis at the coast than in the other regions? There is a generally held belief that most cases of tuberculosis in South West Africa do in fact occur at the coastal towns[1]. With the rapid development of the fishing industry and the marked increase in population, with its resulting housing problems, this may well be the case. Contrast this picture with the Rehoboth bastards and their scattered and wealthy community. Can one say that tuberculosis occurs infrequently in these people, as is believed to be the case in Europeans? It is hoped that with the use of mass X-ray and repeated tuberculin surveys some further light will be thrown on these problems.

TABLE II. REACTIONS (FOLLOWING 10 T.U.) IN NATIVE SCHOOL CHILDREN

Age	*No. Pos.*	*No. Neg.*	*Total*	*% Pos.*
KARASBURG AND KEETMANSHOOP				
5–9	71	90	161	44·1
10–14	221	121	342	64·6
15–19	118	36	154	76·6
Total ..	410	247	657	62·4
SWAKOPMUND AND WALVIS BAY				
5–9	43	32	75	57·3
10–14	97	32	129	75·2
15–19	26	3	29	89·6
Total ..	166	67	233	71·2
WINDHOEK				
5–9	25	62	87	28·7
10–14	112	145	257	43·6
15–19	62	30	92	67·9
Total ..	199	237	436	45·6
REHOBOTH				
5–9	9	27	36	25·0
10–14	22	89	111	19·8
15–19	11	31	42	26·2
Total ..	42	147	189	22·2

TABLE III. REACTIONS (FOLLOWING 10 T.U.) IN COLOURED SCHOOL CHILDREN

Age	*No. Pos.*	*No. Neg.*	*Total*	*% Pos.*
KARASBURG AND KEETMANSHOOP				
5–9	27	82	109	24·7
10–14	65	107	172	37·8
15–19	37	23	60	61·6
Total ..	129	212	341	37·9
SWAKOPMUND AND WALVIS BAY				
5–9	21	26	47	44·7
10–14	21	18	39	54·0
15–19	9	4	13	69·1
Total ..	51	48	99	51·5
WINDHOEK				
5–9	8	25	33	24·2
10–14	35	39	74	47·3
15–19	5	7	12	41·7
Total ..	48	71	119	40·3
REHOBOTH (BASTARDS)				
5–9	32	141	173	18·5
10–14	91	255	346	21·3
15–19	52	56	108	48·7
Total ..	175	452	627	27·9

TABLE IV. REACTIONS (FOLLOWING 10 T.U.) IN EUROPEAN SCHOOL CHILDREN

Age	No. Pos.	No. Neg.	Total	% Pos.
WINDHOEK				
5– 9	8	96	104	7·8
10–14	43	369	412	10·4
15–19	13	139	152	8·5
Total ..	64	604	668	9·5

TABLE V. SUMMARY OF REACTIONS (FOLLOWING 10 T.U.) IN NON-EUROPEAN SCHOOL CHILDREN

Age	No. Pos.	No. Neg.	Total	% Pos.
COLOURED CHILDREN				
5– 9	88	274	362	24·3
10–14	212	419	631	33·6
15–19	103	90	193	53·3
Total ..	403	783	1,186	33·9
NATIVE CHILDREN				
5– 9	148	211	359	41·2
10–14	452	387	839	53·8
15–19	217	100	317	68·4
Total ..	817	698	1,515	53·9

TABLE VI. SUMMARY OF REACTIONS (FOLLOWING 10 T.U.) IN NON-EUROPEAN INFANTS AND ADULTS

Place	Race	Neg.	Pos.	Total	% Pos.
ADULTS 20 YEARS AND OVER					
Karasburg and Keetmanshoop	Native ..	55	398	453	87·8
	Coloured	33	86	119	71·6
Rehoboth ..	Native ..	30	38	68	55·9
	Coloured	26	31	57	56·1
Swakopmund and Walvis Bay	Native ..	19	148	167	89·2
	Coloured	12	55	67	82·0
Walvis Bay canning factories	Native ..	92	334	426	78·4
Windhoek ..	Native ..	21	64	85	75·3
	Coloured	2	5	7	71·4
Windhoek gaol ..	Native ..	25	203	228	89·0
Totals ..	Native ..	242	1,185	1,427	83·0
	Coloured	73	177	250	70·8
CHILDREN 0–4 YEARS					
Karasburg and Keetmanshoop	Native ..	79	15	94	15·9
	Coloured	44	5	49	10·2
Rehoboth ..	Native ..	19	3	22	13·6
	Coloured	2	—	2	—
Swakopmund and Walvis Bay ..	Native ..	26	5	31	16·1
	Coloured	25	6	31	20·0
Windhoek ..	Native ..	16	4	20	20·0
	Coloured	2	1	3	33·3
Totals ..	Native ..	140	27	167	16·2
	Coloured	73	12	85	14·1

SUMMARY

1. A 'pilot' tuberculin-testing survey was undertaken in the principal centres of South West Africa.

2. All non-European school children in these centres were given a single 10 T.U. tuberculin test.

3. The tuberculin reactions were carefully measured and recorded 72 hours after giving the test.

4. The sensitivity to tuberculin in the different racial groups is discussed.

5. The material is presented in graph and histogram form for the different areas and racial groups tested.

My sincere thanks to Dr. C. J. G. Hunter, Medical Officer to the S.W.A. Administration, for organizing this investigation and for his assistance during the survey; also to Mr. A. J. A. Albertyn, Senior Health Inspector, S.W.A. Administration, for his invaluable help. I am greatly indebted to Mr. J. Fleming and Mr. E. A. Pillinger for their assistance in compiling this report, to Miss M. Schofield for the drawings and to Mr. S. E. Cruise, Senior Lecturer in Statistics, Natal University, for his advice.

REFERENCES

1. Hunter, C. J. G. (1954): Personal communication.
2. Union of S. Afr., Bureau of Census and Statistics (1952): Official Year Book for 1950, p. 1236. Pretoria: Govt. Printer.
3. S. Afr. Inst. Race Relations (1949): *Handbook of Race Relations in South Africa*, pp. 744-746. Cape Town: Oxford University Press.
4. Green, L. G. (1952): *Lords of the Lost Frontier*. Cape Town: H. B. Timmins.
5. Fine, E. H. (1954): S. Afr. Med. J., **28**, 34.
6. Palmer, C. E. and Edwards, P. Q. (1953): *B.C.G. Vaccination Studies*. Wld. Hlth. Org. Monogr. Ser.
7. Neethling, H. L. (1954): Personal communication.
8. Windhoek Municipality (1954): Annual Abattoir Returns for 1953.
9. Davis, T. E. (1950): Brit. J. Tuberc., **1**, 1.

ABSTRACTS : UITTREKSELS

Lodge, W. O. en Moure, A. A. (1955), Halifax, Engeland. *Restauracion Parcial del Antro* (Gedeeltelike Herstelling van die Neusbyholte). Bol. Espan. Otorrinolargingol. Broncoesofagol., **8 (1)**, 5-11.

Na 31 jaar ervaring het ons tot die besluit gekom dat net die radikale verwydering van die bokaak vir kwaadaardige bokaakswelsels voldoende genesingskanse aanbied. As gevolg van die toepassing van die moderne verdowing en kiemwering het die klassieke tegniek van Ferguson (1870) soos gewysig deur W. Trotter vir die voorkoming van ooglid-edeem en deur V. Konig om die afsakking van die oog se inhoud te verhoed, 'n baie veilige operasie geword.

Moderne radioterapie het weliswaar die teoretiese moontlikheid van 'n gedeeltelike-bokaakverwydering geskep. Op grond van ons eie ervaring gee ons egter voorkeur aan die radikale operasie, aangesien sommige kankerswelsels straalongevoelig blyk te wees.

Ons het 'n nuwe metode van estetiese chirurgie beskrywe om die neusbyholte na verwydering van die bokaak in 'n geval van kanker gedeeltelik te herstel. Na die bokaakverwydering volgens die klassieke tegniek, verkry ons 'n steeloorentsel uit die neusskot met 'n goeie bloedtoevoer. Ons draai vervolgens die oorentsel sywaarts, om die oogkasboom en die neusbyholtedak te herstel. Die slymvlies van dieselfde kant kan dan gebruik word om die verhemelte te herstel.

Die vernaamste doel van hierdie tegniek is om dubbelsien en ooglidbuitedraaiing te voorkom. Vervolgens gee dit ons 'n kans om die verhemelte te herstel en daardeur die spraakmoeilikhede te verbeter. Ten slotte kan die estetiese aspek van die operasie baie gunstig op dié wyse benader word.

DICHLOROTETRAFLUOROETHANE : FREON 114

A NEW ANAESTHETIC-REFRIGERANT

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Pretoria

There appeared recently an article on the Freons.[1] The Freons are a group of chemicals manufactured by the part-replacement of fluorine for chlorine in compounds such as carbon tetrachloride (CCl_4) or chloroform ($CHCl_3$), and are extensively used in refrigeration compressors. Each replacement causes a drop of about 50°C in the boiling point, so that CCl_4, which boils at 76°C, becomes CCl_3F boiling at 25°C, then CCl_2F_2 boiling at −29°C.[2] The more commonly used compounds are known by code names, and $CClF_2CClF_2$ (dichlorotetrafluoroethane), which was specifically described, is known as Freon 114. The article discussed its merits as a substitute for ethyl chloride; in particular, it suggested its use as an anaesthetic refrigerant for corrective surgical planing.

The presence of the fluorine atoms causes a tightening up of the molecular structure of the Freons which permits them to tenaciously resist any destructive physical or chemical factors. It also renders them physiologically inert. It is therefore possible to inhale or to be exposed to concentrations of as much as 10-20% of these materials for several hours with impunity, and without alteration in consciousness. Freon 114, which boils at 3·6° C, is neither inflammable nor explosive. Its odour is almost imperceptible, and it does not appear either to have primary irritant qualities for the skin or to initiate allergic sensitization.[1]

At the time the publication appeared, a paper on corrective planing was in preparation.[3] A supply of the refrigerant was therefore obtained and its properties were studied. A series of experimental freezings on various areas of the body and for various lengths of time was carried out, the results of which suggested that its action might be too intense to allow it to be used with safety on the face. As it happened, amongst the cases frozen were 3 of 'creeping eruption' (sandworm). All were cured, although the time of exposure was purposely kept short, and in no instance exceeded 20 seconds.* It is known that in the month of July, during which the experiments were performed, there is a tendency for sandworm to heal spontaneously.[4] However, the results may have significance and it is suggested that a more extensive trial is merited. To this end, and because Freon 114 was also used successfully in the opening of boils and acneiform cysts, the apparatus employed is described in some detail.

An 'aerosol' canister (Fig. 1), as used for 'mist-spray' insecticides, was obtained and emptied. It was then sawn through at its mid-point and thoroughly cleaned with carbon tetrachloride. A brass connection union was welded to its base, and the metal tube leading from its valve into its depths was cut off short. The halves were then rewelded and re-painted, and the existing hole in the valve was enlarged to allow the contents to escape as a fine stream. Finally, the reassembled canister† was evacuated on a vacuum pump with a 'T' connection and filled with Freon from a storage cylinder.

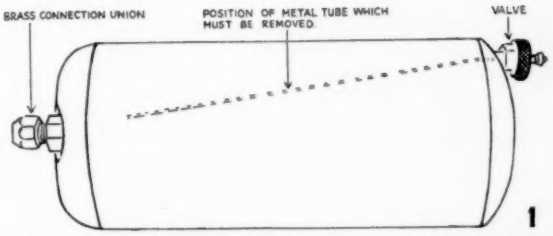

Fig. 1. The metal tube is designed to ensure that the insecticide escapes as a liquid when the valve is uppermost. Because the canister, when used for freezing, must be held with the valve pointing downwards, the metal tube has to be removed.

The canister, being metal, can be transported without risk of breakage or leakage. Its size (6 inches long × 2½ inches in diameter) is such that it can be carried in a coat pocket or a practitioner's bag. It holds 1 lb. 7 oz by weight of the refrigerant.

It is felt that as a refrigerant Freon 114 compares well with ethyl chloride and may be preferable in that (1) its freezing action is more rapid and more intense, (2) it has no general anaesthetic effect, (3) it is non-explosive and non-inflammable, and (4) it can safely and conveniently be transported in the container described.

It is the rapid freezing action which is of value in dealing with sandworm. Despite the pessimism of others, I have always felt that thorough freezing was the treatment of choice for this complaint but, like others, I have not often cured cases in this way. To succeed with ethyl chloride one must keep the affected area frozen for 2 minutes and to do this with a struggling, screaming child is no easy task. With Freon 114, it is thought that the duration of freezing required will be so curtailed that the task will be lightened and the chances of cure increased.

* The duration of freezing should be measured from the instant at which the whole area to be treated becomes blanched. The area to be treated should extend a distance of 2 inches in every direction from the end of the visible track made by the larva.

† The canister is manufactured by the Bridgeport Brass Co., Bridgeport, Conn. and retails at 2s.6d. Freon 114 retails at 16s.6d. per lb. and is obtainable from most refrigeration engineers. The alterations to the canister cost £1 and were the work of Neumann & Wayburne (Pty.) Ltd., Pretoria. Refilling, normally, involves no expense other than the cost of the Freon itself.

REFERENCES

1. Wilson, J. W., Luikart, R. and Ayres, S. (1955): Arch. Derm., **71**, 523.
2. Henne, E. L. (1949): *Encyclopaedia Britannica* Vol. 9, p. 833. Chicago: Encyclopaedia Britannica Inc.
3. Ross C. M. To be published.
4. Loewenthal, L. J. A., (1954): Austral. J. Dermat., **2**, 171.

HOSPITAL STAFFING AND ITS INFLUENCE ON THE MENTAL WELL-BEING OF THE PATIENT IN THE GENERAL HOSPITAL*

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That the Congressional Committee should have chosen for the central theme of its deliberations *The Mental Well-Being of Patients in the General Hospital* is indicative enough of the concern being felt all over the world for the mental well-being of the patient in the general hospital; it also recognizes that physical illness cannot and must not be divorced from the mental state of the patient—in other words, it is necessary to concern ourselves not merely with the immediate physical illness but also with the psychological factors which play an important part in precipitating illness and retarding recovery.

ORGANIZATION OF HOSPITAL STAFF

It is seldom today that one finds a hospital where the general practitioner plays a leading part in its administration and organization. The modern hospital, whether State-operated or conducted as a private institution, is highly specialized and departmentalized with an ever increasing tendency towards mechanization. Technology has so much replaced the personal contact between doctor, patient and nurse that even at some of our older hospitals, once famous for the clinical acumen of their medical diagnosticians, we are now told of doctors who sit behind their desks with a handful of reports, and from the findings brought to them by their technicians deal with the patient without even as much as asking him for an account of his clinical symptoms and his feelings or sufferings, and—what is even more surprising—very often the fee for this is much higher than for a good clinical examination.

The development of modern science and technology has led to progress in certain directions, but unfavourable changes have taken place in hospital organization. Many hospital directorates pay particular attention to turnover in hospital—a factory-like business with frequent admissions and rapid discharges, looked upon as hallmarks of efficiency—but too often after-care is neglected, so that there is no real study of the value to the patient of his period in hospital. We hear a great deal about wonderful cures and wonderful drugs, the surgeons' skill, and the apparatus and the many auxiliary aids used in hospitals; but what is the real value of a hospital with no organization for after-care, having no contact with the social agencies outside the hospital? The social welfare of the patient and his family after his discharge from hospital is an essential factor in rehabilitation. No hospital organization is adequate which does not study the social implications of disease or provide vocational guidance to the patient who may have to adapt himself to a possible new world. What hopeless despair must arise in many patients if they are not given this help and guidance!

What is the good of an organization that does not integrate promotive and curative health services or home and hospital service; that does not organize district nursing services radiating from the hospital; that does not give attention to the long-term patient, the chronic diseases of youth and the preventible diseases far too common in the aged? What of the hospital organization that still relegates the alcoholic to the care of the police-cells and the early or transient mentally disordered patient to a certified institution?

I am thinking, perhaps dreaming, of a hospital organization which aims at what Field-Marshal Smuts would have described as 'Holism' in hospital organization. He wrote on *Holism and Evolution*; but I would say that the correct approach to successful hospital organization should be holistic and revolutionary! It is the accursed multi-directional services in the hospital field, where men follow their own individualistic desires and pet themes, and where selfish exclusiveness leads to a self-acclaimed false prestige, that cause a hospital organization to break down. Think of the frustration in the medical, nursing, clerical and technical staff of such an organization—or the casual attitude and indifference to duty that such an organization may produce. What may be the effect of such a state of affairs on the mental health of the patient? I would say, an immediate fear of neglect and fear that his illness or injury may have lasting and serious effects. This reaction may lead to serious mental agitation and even to an anxiety neurosis—yes, not only to retardation of recovery from the immediate physical illness, but to the establishment of a mental trauma which may manifest itself in devious ways during his stay in hospital and after his discharge.

There will be the constant fear of having to return to a hospital in which he has no confidence, to a staff for which he has no respect. Such an attitude may lead to the masking of illness, from sheer fear and dislike—and so to chronic disease and invalidism. A parent whose child has been neglected through an indifferent organization will not easily send her child to hospital again. A patient who has found himself a mere 'case' handled by the young and inexperienced intern and probationer nurse without sufficient care from the chief physician and the trained nurse will develop feelings of antipathy not easily dispelled. The justifiable criticism may lead to much unjust criticism and institutions justly renowned for their medical treatment may suffer.

NUMBER OF STAFF

In recent years many a hospital service has suffered because of the inadequacy of staff. The world shortage of nurses and, in some countries engaged in the last war, the shortage of doctors and manpower generally have had repercussions on the hospitals. Many countries have resorted to nurse-aids and the increasing employment of technical personnel. Training courses have been reduced to concentrated periods of study.

Lack of essential units may lead to delay in treatment and to unnecessarily prolonged stay in hospital. This may bring about expensive and wasteful hospitalization, and it is certainly a cause for mental concern in a patient whose economic circumstances are such that every extra day away from home causes financial embarrassment to him and his family. Imagine the stress and strain on such a patient when he finds himself in an institution where he has to wait for his treatment or for his examination—because there are not enough staff to attend to all the admissions. Is it any wonder that some patients become so impatient that they leave hospital on their own responsibility?

In many places hospitals have turned away from the old system of 'honorary staff' and instituted a system of whole-time or part-time paid staff, with organized departments, administered in such a way that irregularities do not often occur. Treatments, ward-rounds, examinations are carried out at fixed times. There is regularity in the service. For these reasons, perhaps, one can express a preference for a paid medical staff. Whilst under an honorary system there is perhaps a stronger patient-doctor relationship, there was always the fear by the 'poor' patient that he would be neglected, and that his honorary physician or surgeon would give priority of attention to private patients whilst he would have to put up with young students or the inexperienced medical officer. It is my experience that under a system of paid medical staff, where hours of attendance are regularized and controlled, expressions of dissatisfaction have been less than under the old honorary system. Patients know, too, they are admitted according to medical urgency and few complaints are heard that 'So-and-So' has been favoured because at home he is a patient of the hospital doctor.

Speaking of patients' grievances, let me exhort the hospital administration always, carefully and without prejudice, to investigate complaints. If a staff member has to be reprimanded or even punished do not hesitate to mete out the necessary punishment but, if a patient or a relative has made unfounded complaints, also do not hesitate to tell him so. In this way you shall have a contented staff and a loyal staff—in this way too the public will learn not to be frivolous in its demands and to respect a fair and just administration.

An insufficiency of staff may also cause the organization to give unnecessary consideration to unfair demands by the staff and to pamper their varying moods. I have known staff to threaten to go

* An address given at the 9th International Hospital Congress, Lucerne, Switzerland, 29 May - 3 June 1955.

on strike or to walk out without proper notice. Stern measures and strong action should be taken. Threatened resignations should be accepted—disciplinary action should be taken. No one in this world is indispensable. Patients would be happier if treated with kindness by a willing and disciplined staff, even if they had to suffer a little inconvenience, than by a haughty, callous, cold, indifferent staff emotionally upset by grievances, which are usually imaginary.

QUALITY OF STAFF

Not only numerical inadequacy, but inadequacy in the quality of staff, may also bring about disastrous effects on the patient's mental well-being. An inexperienced and poorly-trained medical and nursing staff may well produce in a patient a spirit of opposition and uncooperativeness, infact a state of emotionalism which sometimes can only be relieved by removal of the patient to the care of someone else. A staff member may be known for his mental instability, his moods of aggressiveness and discourtesy. In my opinion the proper corrective is to dispense with the services of such a person. We should not let a psychopathic personality interfere with the even tenor and quiet atmosphere so necessary in an institution providing for the treatment of the sick.

It behoves the good hospital administrator to preach the doctrine of good behaviour and to practise it daily—from behind his desk, on his rounds, and in the class-rooms. So will there gradually be created in his hosiptal a spirit of goodwill and mutual sympathy—a spirit recognizable at the casualty entrance and pervading the whole institution.

ALLOCATION OF STAFF

An intelligent organization, having selected staff adequate both in numbers and efficiency, will ensure a proper disposition and allocation of staff in the many different departments of the hospital. It therefore behoves the medical superintendent and the matron to exercise great care whom they place in charge of a department or ward and, having fixed the chargeship, that the distribution of working units and allocation of working hours in the ward or department are suitable for efficient functioning. An undue shortage of labour in a department will inflict hardship on the staff and a growing feeling of discontent. Accusations of favouritism for other departments will be made. An indifference to the patients will develop—a spirit of "Why should I worry—why should I work myself to the bone?' Patients will have to wait, both in the special departments and the out-patient departments; 'I have only two hands' will be the cry.

The patient, however, will not see things in the light of staff difficulties. He is sick—he demands attention without delay—minutes are enlarged into hours. He will complain of hunger, and ascribe it to neglect by the dietitian and her staff; he will complain of having caught a cold because he had, so he thought, to wait for hours in the passage for his X-ray or on the hard bench of the out-patient department. He will complain that they had to stand like cattle at the admission centre or in the out-patient department waiting to be 'screened' and 'sifted'.

Has the patient the right to complain under such circumstances? I think he has. The corrective would be to supply more medical staff. Doctors are begging for a hospital connection. Make use of more—spread the service and divide the benefits. 'Many hands make light work' is an old proverb which may well be applied here. Make more use of the part-time nurse—the married nurse; make more use of part-time unskilled employees as messengers and porters.

The staff of a hospital should be made large enough to ensure careful attention and examination, the keeping of proper clinical records, the careful mapping out of treatment. It is hasty work, especially in the out-patient and casualty departments, which may have serious and even fatal consequences, and it is hurry that should be avoided at all costs and punctuality that should be insisted upon.

Undue examination of the patient and undue questioning on social classification and ability to pay, on arrival at hospital, often turns the patient against the hospital. Whilst there are many patients already devoid of pride, there are still thousands of good and valuable citizens who, did they possess the financial means to pay for their hospital attention, would never call upon the State or charity for help.

CONCLUSION

I would quote a passage in a paper submitted by Dr. Marianne Stern of Vienna to the International Hospital Association many years ago: 'The Hospital today is no longer the last refuge of human beings broken by illness and the blows of fate and poverty, who have to be thankful for every kindness shown them; it is becoming more and more the place of treatment for people who know that they have a right to the best treatment, and who bring to the hospital strongly marked opinions and demands and differentiate themselves very much from each other in mental and spiritual characteristics. The consciousness of not receiving charity but of being able to pay for the hospital's services, either personally or as a member of an organization, is also a factor in the attitude of the patient to the hospital, which may range from malicious criticism to unstinted admiration. As hospitals must exist for the patients they must take an interest in the attitude of their patients and in their opinions and requirements and try to learn from their criticism.

I was a very young man when I read these words. They made a lasting impression upon me. I have been for 30 years engaged in hospital administration and I am still endeavouring to apply their meaning. It is quite true—the aim of the hospital and the wishes of the patient ought to be the same. They both aim at rapid and complete recovery from ill-health.

A hospital organization must achieve intelligent management—but a management which also has 'living feelings'; allowing for temperaments and attitudes, yes, but insisting also on disciplined actions. It is necessary to have the captain on the bridge and a trained crew—an experienced and selected crew—a loyal crew—a crew which will do all in its power for its ship (the hospital) and its precious cargo (the patients). With such an organization we can successfully combat the tempestuous seas which so often threaten to engulf us, and bring our ship into the haven of desire.

Johan van Riebeeck, the first Commander of the Cape of Good Hope, a surgeon, found the answer to the scourges which were afflicting his seamen, his colonists and his slaves—in the erection of a hospital. So the Dutch East India Company brought to South Africa a civilized way of caring for the sick. There are still primitive races in Africa, but the black man has learned to give up his trust in black magic. He is not only using the white man's medicine and his hospital but he is studying medicine in his own medical schools and at his own University. He is beginning—he and the Bantu nurse—to take their place in the community and side by side to serve their own people.

In conclusion I would like to say that if the Peace Councils of Nations would give more representation to men and women engaged in the hospital and health field who, in the daily course of life, come into intimate contact with the anomalies of human nature—to those of our professions who are daily fighting for the patient 'to stay his feet from falling, and his spirit from the bitterness of death'—then perhaps it will be found that a scientific spirit, linked with intelligent humility and based on sympathy and kindness, will help much to bring to mankind the peace of the body and soul for which the world is yearning.

DIPHTHERIA AND WHOOPING COUGH IMMUNIZATION IN BECHUANALAND

A two-year immunization campaign will begin in Bechuanaland in May 1956 for the vaccination of 120,000 children against diphtheria and whooping cough. The United Nations Children's Fund (UNICEF), will support this project with a credit of approximately £6,500, which will provide the necessary vaccine, toxoids, inoculation equipment and transport.

Although information on the incidence of whooping cough and diphtheria is restricted to the comparatively few cases that now reach hospitals and health centres, it is clear that prevalence rates are increasing every year. Diphtheria, which was virtually unknown in the Protectorate a few years ago, accounted for 132 hospital cases last year, and in 1954 whooping cough affected 1,302 children.

Immunization against both diseases will be provided by teams working under WHO supervision. The mass campaign will begin along the Mafeking-Bulawayo railway line in the most densely populated parts of the territory. The Bechuanaland Government will spend approximately £8,600 in offering this free immunization to babies and children under 6 years of age. Inoculation will not be compulsory, but with the assured cooperation of local chiefs and headmen, it is expected that the great majority of children of the age-groups most susceptible to the diseases will receive protection. When this campaign is completed in May 1958, the Bechuanaland Government intends to continue routine inoculations on a regular basis as part of a long-term plan to eliminate whooping cough and diphtheria.

MEETING OF SOUTH AFRICAN MEDICAL AND DENTAL COUNCIL

Among the great number of subjects discussed at a meeting of the South African Medical and Dental Council held in Cape Town on 19-22 September, three of outstanding importance are reported below. Other matters considered at the meeting will be reported in the next issue of the *Journal*.

SPECIALIST OR CONSULTANT REGISTRATION?

At the meeting the Medical and Dental Council gave further attention to the question of specialist registration, based on the report of the special *ad hoc* committee appointed to consider and report on the registration of specialities. This committee had before it the results of the Questionnaire of 1954, and the interpretation of these results by the Federal Council of the Medical Association (March 1955), which was that (*a*) a majority of the voters were in favour of some sort of register, (*b*) a majority favoured a register of consultants, (*c*) a majority favoured a statutory register, and (*d*) an overwhelming majority felt that specialists or consultants should not make domiciliary visits except in consultation or in cases of emergency.

The *ad hoc* committee reported in favour of all four points, and the discussion centred almost entirely on the recommendation concerning a register of consultants, which was: 'That the committee recommends to Council that it should institute a register of consultants, and set the machinery in motion to replace the existing register of specialists by a register of consultants over a period of, say 5 years, having regard to any vested interests which persons at present on the specialists register may have'. A long debate took place on this issue, after the committee's recommendation had been passed 'that a statutory register in some form be maintained by the Council'.

As a preliminary to the main debate the definition of 'consultant' was discussed and the Medical Association's definition, which was used for the purpose of the Questionnaire, was adopted by the Council, viz.: 'A consultant is a medical practitioner who only attends patients in consultation with, or at the request of, other practitioners'.

In the debate on the proposed register of consultants, members spoke vigorously on both sides. Most of the arguments that were put forward have been heard many times in the past year or so. Those in favour of the consultants register emphasized the disadvantages which general practitioners, especially in the larger towns, suffer from competition by specialists who do not restrict themselves to consultant practice; and the harm which results to the status of the general practitioner (or family doctor), the patient-doctor relationship, and the prestige of the medical profession as a whole.

Others felt that these troubles are the result of specialization itself rather than the specialist register. On the other side it was argued that no country had a consultants register and that the proposal was 'a shot in the dark'; that many specialists would find it impossible to carry on if they were precluded from receiving patients 'off the street'; and that a prohibition of this sort would produce difficult situations.

Several speakers emphasized that it was undesirable to deprive the patient of the right of attention by any doctor he chose, whether specialist or not, and some maintained that restriction in this respect would not be tolerated by the public. One suggestion that was made was that the specialist register should remain as at present and difficulties or abuses should be dealt with by ethical rules bearing on the conduct of persons on the specialist register.

Following the debate, the recommendation of the *ad hoc* committee that a register of consultants should be instituted to replace the register of specialists in (say) 5 years was voted upon, when 10 voted in favour and 10 against. The President declined to record a casting vote, and the whole issue was referred back to a new *ad hoc* committee consisting of the President (Dr. Oosthuizen), Drs. Black, Bloom, C. Shapiro and Wagner, and Mr. Rood. The old *ad hoc* committee was discharged.

SHORTAGE OF DOCTORS IN THE GOVERNMENT SERVICE: PROPOSED APPOINTMENTS FROM OVERSEAS

A communication from the Minister of Health was considered in which he referred to the serious shortage of doctors in the Union Health Department, and asked the Council to consider further amending the regulations promulgated under Government Notice 256 of 1947 so as to apply these regulations to persons in the employ of the Union Government. The Executive Committee had considered the matter and recommended accordingly.

The existing regulations permit the Council to register two special classes of persons from countries not subject to reciprocity of registration with the Union, viz. (1) persons engaged in missionary practice, and (2) persons engaged by Universities and approved scientific institutions. The registration of such persons is for 5 years only, renewable by the Council for further 5-year periods, and their medical activities are strictly limited to the purposes for which they are specially registered.

In practice the special registration is restricted to vacancies for which the Council is satisfied suitable applications are not forthcoming from normally registrable practitioners. The proposed amendment would create a third class of person from non-reciprocity countries to be specially registered under these regulations, viz. persons employed by the Union Government; and persons registered under this provision would be subject to the same 5-year restriction, and a similar limitation of their medical activities, as the two existing classes. Their registration or its renewal would be subject to the Council's discretion, and could be made subject to the condition that applicants for the positions they occupy cannot be found from normally registrable persons. In the discussion it was stated that, if the regulations are amended in this manner, it is expected that applicants for the vacant positions in the Government service will be forthcoming from amongst medical practitioners in Germany.

After debate the proposal was voted on and lost by a narrow majority. Dr. du Pré le Roux, Secretary for Health, however, gave notice to rescind this decision and a second debate on the subject took place the next day, after which the motion to rescind was passed by the necessary two-thirds majority and the proposed amendment to the regulations was passed. It was made applicable also to medical staff needed in the medical service of the Administration of South West Africa. The amendment will be forwarded to the Minister for promulgation.

In the debates Dr. le Roux stated that 80 out of 297 posts are vacant on the medical staff of the Union Health Department, and spoke specially of the unfilled posts on the staff of pathologists and in the mental hospital service. He said that the Department has 25,000 patients in its own hospitals, and that there is a grave shortage of accommodation for mental patients and cases of

tuberculosis. For the former 3,000 additional beds are required and for the latter, 1,000. It will not be possible to operate these extensions without an increase of staff, and even the existing vacancies cannot be filled. The posts had been advertised in Britain, Holland and other countries as well as South Africa.

Dr. le Roux emphasized that his Department, and the country, were faced with a serious and immediate emergency. He referred to the overseas recruiting of entrants to essential Government services, which had been undertaken with the approval of all political parties, and urged that the Medical Council should not oppose a similar importation of medical practitioners in the face of a similar emergency. He said that the numbers to be imported would not be great—there was no intention of filling 80 vacancies immediately—and that advertisement for candidates under the new regulations would not be issued except after prior consultation with the Medical Council, without whose authority no registration could be effected.

Many members took part in these debates. Emphasis was laid on the drawbacks in the Government service, which accounted for the loss of staff and lack of applicants and which, it was pointed out, was in contrast with the experience of the provincial hospital services, where there were more applicants than vacancies, even for posts carrying lower salaries. This was explained by the fact that the provincial posts carried better prospects of professional and financial advancement, and in particular enabled incumbents to fulfil the requirements of the Medical Council for specialist registration.

It was urged that these discrepancies between the services should be rectified, and a proposal was made that the Minister of Health should be asked to appoint a commission of enquiry into the conditions of medical service in his Department; this proposal, however, was not put to the vote.

Special reference was made to the commencing salary of £1,020 (plus c.o.l. allowance in the case of married incumbents), which, it was suggested, was insufficient. Dr. le Roux pointed out that in general this grade was for junior medical officers (ex-interns) and not for specialist or more experienced medical officers. Several speakers in the second debate said that though they would vote for the Minister's proposal, they still regarded it as urgently necessary to investigate and improve the conditions of service.

ELECTED REPRESENTATIVES OF MEDICAL PRACTITIONERS : PROPOSED INCREASE

At the previous meeting of the Council Dr. Radford moved 'that it be recommended to the Hon. the Minister that section 2(4) of the Medical, Dental and Pharmacy Act be amended to provide for an increase in the elected medical representatives on the Council by 4 members'. At that meeting this resolution was referred to the Executive Committee for consideration and report.

The matter again came before the Council at the present meeting and, notwithstanding that the Executive Committee did not submit a favourable recommendation, Dr. Radford's motion, after debate, was passed by the Council.

The main point made by those who spoke in favour of the motion was that when the Act was passed the elected medical members were in the majority, that owing to the increase in the appointed members (especially those appointed by Universities) this was no longer the case, and that the original position in this respect ought to be restored.

SOME PROBLEMS OF INDUSTRIAL HEALTH

A meeting of the Cape Town sub-group of the South African Society for Industrial Health was held on 14 September. Twenty-six people attended.

Dr. L. Blumberg gave a short address on 'Night Work' from the point of view of health. He stated that the 5-day week, though attractive to the worker, was not good for him if it meant shorter rest periods during the day for food intake and relaxation. The result was a drop in productivity of 6-10%.

Certain individuals should never perform night work. These are: (1) Young people below the age of 23, (2) those who suffer gastric disturbance, (3) arrested cases of tuberculosis, and (4) sufferers from rheumatism.

In adolescents physiological changes are incomplete and may be impaired by night work. The strain of adjustment to night work tends to attack the weakest point of the body.

The practice of changing shift weekly from day work to night work led to accumulative industrial fatigue, because the metabolism could not be adjusted and re-adjusted in so short a period. A 6-week period was the best. All night workers should have longer periods of sleep to compensate for the lighter sleep obtainable during the day. Workers on night shift should be weighed regularly and watched for signs of anaemia and neurasthenic symptoms. Hot meals should be provided during the shift. On the whole, night work should be discouraged, as proneness to accident and loss of productive capacity was fairly general among night workers.

A guest-speaker, Mrs. A. G. Weiss, gave details in relation to health from the point of view of personnel departments. She proved that welfare had a definite cash value. This view was accepted by responsible employers. When output fell medical and social factors were investigated and adjusted. The effectiveness of this cooperation was demonstrated by a steadily decreasing rate of days lost. The figures were 5·5% in 1951 and 3·5% in 1955, a decreased labour-turnover, and a striking increase in the pregnancy rate, indicative of the security felt by the workers.

Another guest-speaker, Mr. R. P. Simpkins, electrified the meeting by giving a detailed statement of the views of employers opposed to the introduction or extension of medical care for their workers. The basis of the statement was that the doctor would not be available at every moment of the day and night to attend to injuries, that the surgery could not be equipped for every possible contingency, and that injured workers would have to reach or be taken to the surgery. It was suggested that the sub-group should draw up an adequate reply for the use of the Industrial Safety Committee.

Miss du Toit, an industrial nurse, invited to speak on the nutrition of workers, described the poor nutritional state of the bulk of the labour force, and the consequent necessity of good canteen facilities. It still remained to educate workers most in need of food to take advantage of these facilities. Free milk should be given to workers with quiescent tuberculosis and workers exposed to chemical hazards. Small factories find catering uneconomic, but it would reduce accident proneness and industrial fatigue if they could organize simple nourishment on a non-profit basis. She suggested canteen committees with worker representation, and a voucher system, as possible means of popularizing factory meals.

A stimulating discussion followed. A further meeting has been arranged for 12 October at 8.15 p.m. and will take place at the Crawford Hall, Union Centre, 350 Victoria Rd., Salt River. The meeting will be addressed by Dr. H. L. Ackerman of the City Health Department, on the rehabilitation in industry of the recovered case of tuberculosis.

PASSING EVENTS : IN DIE VERBYGAAN

Dr. Louis H. Bauer, Secretary-General of the World Medical Association, who has just completed a visit to the member association in Australia, has been invited to present the Newland Oration at the 9th Australasian Medical Congress, and will also receive the degree of Doctor of Science, *honoris causa*, from the University of Sydney and present the Joseph Bancroft Oration before the Queensland Branch of the Australian Medical Association in Brisbane.

At Research Forum, University of Cape Town on 5 October, 1955 at 12 noon in the large A floor lecture theatre, Groote Schuur Hospital, Dr. R. E. Bernstein will read a paper on *Diamox Diuresis*.

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Dr. Noel H. Aldridge, M.B., Ch.B. (Cape Town), D.M.R.D. (R.C.P. & S.), who has been studying Radiology in Scandinavia and the United Kingdom for the past 2½ years, has been appointed to the Staff of the Johns Hopkins Hospital, Baltimore, Md., U.S.A., as Instructor in the Department of Radiology.

Union Department of Health Bulletin. Report for the 7 days ended Thursday, 15 September 1955.

Plague, Smallpox, Typhus Fever: Nil.

Epidemic Diseases in Other Countries.

Plague: Nil.

Cholera in Calcutta (India); Chalna, Dacca (Pakistan).

Smallpox in Rangoon (Burma); Phnom-Penh (Cambodia); Ahmedabad, Bombay, Tellicherry (India); Dacca (Pakistan).

Typhus Fever in Cairo (Egypt).

CHANGES OF ADDRESS NOT REPORTED

Correspondence directed to the undermentioned practitioners at the addresses stated is returned 'unknown'. They should therefore communicate without delay with the Registrar of the South African Medical and Dental Council at P.O. Box 205, Pretoria.

Section 16 of the Medical, Dental and Pharmacy Act imposes the duty on registered medical practitioners to intimate any change of address to the Registrar within 1 month, and failure to do so may result in removal from the register.

Batchelor, George Bryan, Peninsula Maternity Hospital, Cape Town.

Forrest, Thomas Ballentyne, Sterkspruit, Cape.

Kornreiter, Centa, Benedictine Hospital, Nongoma, Zululand.

Lambinon, Lambertus, Good Hope Buildings, 49 Boom Street, Pretoria.

MacNab, Tom Davidson, 31 Lister Buildings, Jeppe Street, Johannesburg.

Robinson, John Franklin, 131 Cheyne Walk, Chelsea, London.

Schrader, Armin Egon, 22 Cotswold Drive, Saxonwold, Johannesburg.

Scorgie, Douglas Rae, c/o G. Scorgie, Mamre Gold Mine, P.O. Slaaihoek, Transvaal.

Ten Kate, Klaas, P.K. Nzhelele, oor Louis Trichardt.

Van Niekerk, Stefanus Cornelius Jakobus, Koning Edward-hospitaal, Durban.

NEW PREPARATIONS AND APPLIANCES : NUWE PREPARATE EN TOESTELLE

P.D. & Co. (Pty.) Ltd., the South African subsidiary of Parke, Davis & Company, announce the introduction of 3 new preparations and supply the following information:

MILONTIN KAPSEALS

Hitherto the drug treatment of petit mal attacks has been relatively ineffectual as compared with grand mal. Milontin Kapseals (N-methyl-a-phenyl-succinimide, Parke Davis) is a recently introduced anti-convulsant developed in the research laboratories of Parke Davis which, owing to its desirable therapeutic action and low toxicity has been found adequately to fill this therapeutic need. Renewed impetus was given to the search for a drug effective in petit mal attacks by the preparation and pharmacological investigation of a large number of succinimide derivatives. Chen and others[1] investigated a number of alpha-phenylsuccinimides and found them to be effective anti-convulsants. The Parke Davis research found Milontin an effective antagonist of pentylenetetrazol convulsions, experimentally induced in rats[1]. Subsequently clinical investigation over several years proved its value and low toxicity.

Indications. Milontin Kapseals have been used successfully in all clinical types of petit mal. Zimmerman[2] used Milontin in 50 cases with good results. Complete control was obtained in 15 patients and practical control (over 80% reduction of attacks) in a further 15. Of the remaining 20 patients, 16 showed partial reduction, averaging at least 50%, and 4 did not respond to treatment. Milontin proved effective in a number of cases resistant to or not well controlled by earlier therapy. In a later study of 100 cases in which either the seizures were intractable to standard anti-convulsants or a toxic response to such drugs was shown, Zimmerman[3] found that Milontin gave complete control of symptoms in 21 patients and practical control (over 80% reduction) in a further 28. Of the remaining 51 patients, 32 showed partial control whilst the others did not respond to treatment. The duration of therapy ranged from 4 to 104 weeks, and 5 of the cases had been free from attacks for over 1 year. Millichap[4] established the efficacy of Milontin in 20 unselected patients with petit mal, 18 of whom had been treated with other drugs which, with one exception, had proved to be ineffective or had produced only temporary improvement. Complete control was established in 26% of the patients, and attacks were reduced by 80% or more in 37% of patients. In all the responsive cases the duration and severity of seizures were diminished. In many of the cases showing reduction in attacks, improvement in both mental and physical activity was observed. In a study by Smith and Forster[5] Milontin showed itself to be particularly efficacious in the realm of petit mal triad and in those patients who have myoclonic jerks.

Dosage and Administration. The dosage is adjusted according to the requirements and tolerance of the individual patient. It may vary from 0·5 g. to 1·0 g. 2-3 times daily, i.e. a total of 1-3 g. per day, irrespective of age. Initial dosage should not exceed about 1 g. per day; if this does not produce a satisfactory response, the total daily dosage may be increased by 0·5 g. at intervals of two or three weeks until the response is adequate. Withdrawal of the drug, should this be desired for any reason, should be accomplished gradually in a similar manner. Cumulative effects have not been observed. Milontin is free of severe toxic manifestations (Smith and Forster[5]). Lereboullet *et al.*[6] found toxicity to Milontin to be practically non-existent. These authors drew attention to the fact that the serious haematopoietic effects noticed with other drugs used in the treatment of petit mal, were not observed in their patients. As a general precautionary measure, however, it is advisable to carry out periodic urine analysis and blood counts in patients receiving regular courses of Milontin. Milontin should be used with caution in cases who have grand mal, as in isolated instances it has been reported that latent grand mal may be precipitated into active grand mal epilepsy.

Milontin Kapseals each containing 0·5 g. of N-methyl-a-phenyl-succinimide, and produced by Parke Davis at Port Elizabeth are supplied in bottles of 50 and 250.

EPANUTIN SUSPENSION

This is Epanutin in a palatable suspension form, specially adapted for the needs of infants and young children, Epanutin Capsules (phenytoin sodium) were introduced by Parke Davis & Company in 1938 for the control of grand mal epilepsy. In epilepsy, where so often the dosage of Epanutin must be individualized, the suspension provides a convenient method of medication.

Dosage and Administration. Each 4 c.c. (teaspoonful) contains 1½ gr. of phenytoin sodium, and the suggested dosage for adults and children of 6 years or over is 1 teaspoonful 3-4 times daily. For children under 6 years of age, 1/4 to 1/2 a teaspoonful 2-4 times daily is usually sufficient. It will be remembered that if it is desired to change the treatment of patients on other drugs such as

phenobarbitone or bromides to Epanutin, the transitional stage should be gradual owing to the risk of status epilepticus.

Epanutin Suspension is supplied in bottles of 4 and 16 fl. oz.

CHLOROSTREP SUSPENSION

This is a palatable combination of Chloromycetin and dihydro-streptomycin, which has been specially devised to meet the needs of children and those adults averse to taking Chlorostrep in the form of kapseals. Administration of Chlorostrep Suspension is followed by marked depression or complete elimination of the coliform group of micro-organisms and pathogenic streptococci, although the total bacterial count of intestinal flora is not affected. This anti-bacterial activity has significant clinical application in bowel surgery.

Indications. Chlorostrep Suspension is used pre-operatively and post-operatively in colonic and rectal surgery, where mixed infections of the peritoneum are particularly susceptible to the wide range of anti-bacterial activity afforded by the combination of Chloromycetin and dihydro-streptomycin. The synergistic action of these two antibiotics is effective pre-operatively and post-operatively in large-bowel or small-bowel resection, in rectal surgery, and in the removal of infected pilonidal cysts with sinuses. By lessening post-operative infection, Chlorostrep Suspension shortens the healing time, reduces the need for catheterization and minimizes the patient's discomfort. As Chlorostrep Suspension is highly effective against most species of salmonellae and shigellae it is suggested in the treatment of acute enteritis of children and in acute diarrhoeal diseases affecting adult patients.

Dosage and Administration. Chlorostrep Suspension is given in a dosage of 1-4 teaspoonfuls every 6 hours, according to the patient's weight. Each teaspoonful contains 125 mg. of Chloromycetin and 125 mg. of dihydro-streptomycin, the tolerated dose being calculated largely on the Chloromycetin content, since the dihydro-streptomycin has little, if any, systemic affect. It is suggested that a dosage of 2-4 teaspoonfuls is given pre-operatively every 6 hours for 2-3 days, and is continued post-operatively for 5-6 days when oral intake of fluid is reinstated.

Chlorostrep Suspension is applied in bottles of 60 c.c.

REFERENCES

1. Chen, G., Portman, R., Ensor, C. R. and Bratton, A. C. Jr. (1951): J. Pharmacol., **103,** 54.
2. Zimmerman, F. T. (1951): Arch. Neurol. Psychiat., **66,** 156.
3. *Idem* (1953): Amer. J. Psychiat., **109,** 767.
4. Millichap, J. G. (1952): Lancet, 907.
5. Smith, B. and Forster, F. M. (1954): Neurology, **4,** 137.
6. Lereboullet *et al.* (1953): Bull. Soc. Méd. Hôp. Paris, **69,** 87.

BOOK REVIEWS : BOEKRESENSIES

YEAR BOOK ON ENDOCRINOLOGY

The Year Book of Endocrinology (1954-1955 *Year Book Series*). Edited by Gilbert S. Gordan, M.D., Ph.D. Pp. 392. 86.00. Chicago: Year Book Publishers, Inc. 1955.

Contents: 1. The Pituitary Gland. 2. Neurohypophysis and Water Metabolism. 3. The Thyroid Gland. 4. The Parathyroid Glands and Calcium Metabolism. 5. The Adrenal Glands. 6. The Reproductive System. 7. Carbohydrate Metabolism. 8. Endocrine Treatment and Neoplastic Diseases. Index.

In the period of initial enthusiasm which follows graduation, many of us try to cover a larger number of journals than we can manage adequately. Sooner or later, we realize the futility of attempting a stand against the limitless outpourings of the medical press. It is at this stage that we learn to appreciate the Year Book series. For the convenience, someone else has scoured the literature, extracted the best articles, classified them, and now delivers them in an easily-digested form.

The latest Year Book on Endocrinology is edited by Dr. Gilbert Gordan, who has made numerous personal contributions to this field. He has forestalled an obvious criticism of this sort of 'digest' by referring the reader to the original paper where he feels that a synopsis fails to do it justice. In addition to almost 300 abstracts, the volume contains 3 excellent 'special articles'. Dr. Albert Segaloff writes on pituitary gonadotrophin, presenting his own controversial views on the subject; Luetscher and Curtis review the important recent work on aldosterone; and Dr. Bernstein gives an account of some new and stimulating trends in the treatment of metastatic breast carcinoma.

R.H.

THE NERVOUS SYSTEM AND CLINICAL NEUROLOGY

Textbook of the Nervous System: A Foundation for Clinical Neurology. By H. Chandler Elliott, M.A., Ph.D. Second Edition. Pp. 437 + xx, with 158 illustrations and 50 plates. 72s. Philadelphia, London, Montreal: J. B. Lippincott Co. 1954.

Contents: Part I. The Nervous System in Outline. 1. Neurology and the Medical Student. 2. Origin and Function of Nerve Cells. 3. The Ground Plan of the Central Nervous System. 4. Development of the Ground Plan. 5. Suprasegmental Structures: I. The Sensory System. 6. Suprasegmental Structures: II. The Motor System. 7. The External and Internal Form of the Human Brain. *Part II. The Nervous System in Detail.* 8. Nervous Conduction. 9. The Neurons. 10. Nerve Fibres and End-Organs. 11. The Spinal Cord, Outer and Inner Form. 12. Sensory Tracts and Motor Centers of the Cord. 13. The Cranial Nerves. 14. The Auditory, Vestibular, and Gustatory Systems. 15. The Visual System. 16. The Thalamus. 17. The Corpus Striatum and Allied Structures. 18. The Form of the Hemispheres. 19. The Cerebral Cortex. 20. The Cerebellum. 21. The Autonomic System. 22. Higher Centers Influencing the Autonomic Nervous System. 23. The Coverings of the Brain. 24. The Circulation of the Central Nervous System. Appendix I. Appendix II. Bibliography. Atlas. Index.

This is an ideal book for students. It is well illustrated and well printed on good paper. It is written in an entertaining manner, which is a point of great importance, encouraging the reader to continue his study of the book. The subject-matter is well presented. It is divided into 2 parts, general and specialized, and this makes it easier for students to understand this complicated subject.

The different nervous pathways are vividly and originally explained by excellent illustrations and diagrams, which are of inestimable value in the teaching and learning of this subject.

To counter the impression, which these diagrams may give, that all pathways and nuclei are easy to recognize and classify, the atlas at the end of the book is of great value. By comparing the atlas and the diagrams the students get a true idea of the complexity of the subject.

The index and bibliography are carefully written but, in my opinion, standard work of authors such as K. Brodmann, C. and O. Vogt or R. W. Hess should have been mentioned, for they contributed fundamental discoveries in the field of neuroanatomy.

It is essential for students of neurosurgery, neurophysiology and neurology to have a thorough knowledge of anatomy of the nervous system. This book helps to achieve this knowledge in a pleasant and original way and it can be recommended to both students and postgraduates.

M.W.

THORACOSCOPE AND SURGERY OF NERVOUS SYSTEM

Thoracoscopic Approach to the Surgery of the Nervous System (Thorakoskopische Eingriffe am Nervensystem). By Dr. E. Kux, Surgical Clinic of the University of Innsbruck. Pp. 130 + xii with diagrams and photographs in colour. DM 28.50. Stuttgart: Georg Thieme Verlag.

Contents: Operative technique—(1) Fundamental considerations, (2) The pneumothorax, (3) Thoracoscopy, (4) Technique of nerve resection, (5) Dangers and complications, (6) Operative statistics. Indications—(1) General, (2) Gastroduodenal ulcerations, (3) Angina pectoris, (4) Hypertension, (5) Pulmonary tuberculosis, (6) Diabetes mellitus, (7) Other indications including diagnosis, (8) Physio-pathological considerations. Index.

Dr. Kux's book describes simply and clearly the method of intrathoracic surgery by means of a telescope and a diathermy point, inserted into the pleural space through cannulas. The apparatu

is similar to the Jacobaeus thoracoscope familiar to phthisiologists, or its various modifications. But Dr. Kux has extended its use to a large number of thoracic organs visible through the pleural membranes, such as the splanchnic and sympathetic nerves and ganglia, and the vagi. The technique is illustrated by colour-photographs and line drawings, and its basic simplicity and lack of danger demonstrated. His armamentarium includes, beside the normal cautery-point of the Jacobaeus instrument, a delicate forceps allowing avulsion as well as cauterization of sympathetic, vagus and splanchnic nerves, under local anaesthesia.

The subsequent chapters discuss the morbid conditions benefited by interruption or avulsion of these nerve tracts, such as hypertension in its various forms, gastro-duodenal ulceration, asthma, angina pectoris, Raynaud's disease, etc. Their various aspects are clearly described in a summary but comprehensive form easy to follow and understand. For instance, the arguments for and against removing pain in cases of angina of effort are clear, and illustrated by more than 50 cases. Since the operative mortality is so low (2 patients from more than 1,100 operations) the results are purely those of the physiological interference with the nerves; he can also deal with cases of diseases such as hypertension or cardiac ischaemia in stages too advanced for open thoracotomy. In the 52 patients with angina pectoris he destroyed the upper third of the sympathetic chain excluding the stellate ganglion, and abolished chest pain in all of them, though some retained pain in the neck; tachycardia was frequently diminished; in no case did he find that this insensitiveness led to over-exertion on the part of the patient. In 12 patients the operation was bilateral, in 40 it was restricted to the left side.

His results in hypertension are too detailed for easy summary, but seem to compare well with those of other surgeons; his operation is of course limited to the thoracic ganglia, but some extremely advanced disease seems to have been favourably affected, with no mortality.

Criticism can be made of his splanchnic resections for gastro-duodenal ulcerations, some forms of jaundice, diabetes etc. This is not quite fair, since the underlying theory of these operations originates with international figures such as Leriche, van Haberer, Finsterer etc., although their ideas are not generally accepted in English-speaking countries.

The author is advocating an easy approach to intrathoracic nerve surgery which deserves consideration by all who can master the technique, and especially by thoracic surgeons for whom both technique and anatomy are familiar.

It is a handsome book, well printed on good paper and well illustrated and indexed; it awaits and deserves a good English translation.

L.F.

NEW JOURNAL ON ALLERGY AND ASTHMA

The first number consisted of Part 1 and 2 (pages xiv+86) issued in May 1955, and Part 3 (pages xii+64) issued in June 1955. Page size 9½×6¾ inches. Further numbers will appear at intervals of 2 months. Annual subscription DM 28, to Georg Thieme, Hainstrasse 17-19, Leipzig C 1. Original contributions to Editor, Allergie und Asthma, Salzstrasse 22, Coswig-Dresden.

The journal is devoted to diagnosis, treatment and prevention of allergic diseases and asthma. The title is intriguing, reflecting as it does the modern tendency in allergic thinking towards the view that not all bronchial asthma falls within the strict definition of allergy based on an antigen-antibody reaction.

The editorial collaborators are mainly German, although there are also representatives from Switzerland, France, Sweden, Hungary, Italy and the Netherlands. The comprehensive scope of the journal may be assessed from the wide variety of articles in the first parts, including: Allergy and the Nervous System, Bronchial Asthma as a Haemodynamic Problem, Constitution and Allergy, Allergy Problems in connection with Dental Foreign Bodies in the Mouth, The Treatment of Pollen Allergy, Adrenocortropic Hormones in Status Asthmaticus, The Fundamentals of Asthma Therapy. The book reviews and abstracts from current literature are also of much interest.

Allergie und Asthma is a welcome addition to the small number of allergy journals, which in the main represent the English-speaking world.

D.O.

VIRUS AND RICKETTSIAL DISEASES

Virus and Rickettsial Diseases. By S. P. Bedson, M.D., D.Sc., F.R.C.P., F.R.S., A. W. Downie, D.Sc., M.D., F. O. MacCallum, B.Sc., M.D. and C. H. Stuart-Harris, M.D., F.R.C.P. Second Edition. Pp. 406 + viii, with 34 illustrations. 30s. London: Edward Arnold (Publishers) Ltd. 1955.

Contents: 1. Viruses: Some General Considerations. 2. Immunity. 3. The Natural History of Virus Disease. 4. Chemotherapy. 5. The Rickettsiae. 6. Psittacosis-Lymphogranuloma Venereum Group. 7. Smallpox. 8. Chicken-Pox and Zoster. 9. Molluscum Contagiosum and Warts. 10. Herpes Simplex. 11. Influenza, Common Cold and Other Acute Respiratory Infections. 12. Measles and Rubella. 13. Mumps. 14. Glandular Fever. 15. Hepatitis. 16. Gastro-Enteritis. 17. Rabies. 18. Arthropod-Borne Virus Encephalitis. 19. Diseases of the Central Nervous System Suspected of Being Due to Viruses. 20. Acute Anterior Poliomyelitis. 21. Coxsackie Viruses. 22. Virus Meningitis. 23. Yellow Fever, Dengue, Sandfly Fever, and Rift Valley Fever. 24. Animal Viruses Affecting Man. Appendix. Index.

This welcome second edition of a valuable book on the viruses and rickettsiae has been effectively revised. The subject with which it deals is undergoing very rapid development, and the authors are to be congratulated on the manner in which the results of recent researches have been incorporated in the new edition. A new chapter on the Coxsackie viruses is introduced and the old chapter on Bacteriophages has been omitted.

Most of the chapters retain their original form but all have been revised to include reference to recent laboratory and clinical work and many have been partly rewritten or their subject-matter redistributed. No chapter illustrates this better than that on Poliomyelitis, which incorporates the most important new knowledge such as that on tissue culture, epidemiology, the use of gamma globulin, and the early work on vaccines.

Some of the chapters remain sketchy; for instance, we in South Africa would like to see a somewhat more comprehensive account of rabies.

The authors are to be congratulated on the high standard they maintain in this volume, which should remain a valuable asset to the libraries of both students and practitioners.

M.v.d.E.

CATERACT SURGERY

Advanced Surgery of Cateract. By Daniel B. Kirby, M.D., F.A.C.S. Pp. 271 + xi, with 138 figures and 96 illustrations in full colour. £11. Philadelphia & Montreal: J. B. Lippincott Company. 1955.

Contents: 1. Advances in Surgery of Cataract as Found in the Current Literature. 2. Classification of Lens Diseases. 3. Prognosis for Restoration of Vision. 4. Preparation of the Patient for Cataract Surgery. 5. Perfected Instrumentation and the Healing of Ocular Tissues. 6. The Kirby Aspiration Extraction of Congenital Cataract. 7. The Incision. 8. The Preferred Treatment of the Iris. 9. Corneoscleral Sutures. 10. Extracapsular Extraction. 11. Intracapsular Extraction. 12. Complications of Cataract Surgery. 13. The Results of Advanced Surgery of Cataract; The Adjustment of the Patient to Aphakia; Summary and Conclusions. Bibliography. Index.

That the late Dr. David Kirby made a devoted life study of the subject of Cataract was apparent when examining his first comprehensive book *Surgery of Cateract*, published only 5 years ago.

This new volume entitled *Advanced Surgery of Cataract* is in itself a complete monograph on the subject, though somewhat shorter than its predecessor and complementary to it.

Dr. Kirby sets out to rewrite the subject in the light of the advances which accrued between 1949 and 1953, giving his preferences in every detail of technique and his reasons for these preferences.

The book is lavishly illustrated by excellent drawings and some beautiful coloured diagrams, which doubtless accounts for its heavy cost. The style and arrangement of the book are unusual.

The use of the word 'advanced' is rather irritating both in the title and the text, especially as in these days of rapid advances the word so soon becomes inappropriate.

Dr. Kirby is very impressed with the value of curare in cataract surgery, and devotes several pages to a description for its use, methods of its administration, and avoidance of complications.

It is interesting to read that a special new type of anaesthetist is emerging, called an Akinesiologist!

Dr. Kirby had a preference for intracapsular extractions, in which he advocates a fornix-based flap, prepared in advance by

peritomy at the limbus, and for postplaced radiational edge-to-edge sutures.

This book is of value to the young ophthalmologist wishing to study details of modern cataract surgery and to the older ophthalmologist who may wish to modernize his techniques, but on the whole it adds very little to the earlier volume. R.T.

CORRESPONDENCE : BRIEWERUBRIEK

SPECIAL SERVICE FOR DOCTORS

To the Editor: May I draw the attention of your readers to the special service for doctors which is to be held at 7.30 p.m. on Sunday 16 October, 1955 in St. Stephen's Church, Pinelands?

This service has a double purpose. In the first place it will, I hope, provide an opportunity for doctors and others engaged in the Ministry of Healing to join together in a service of prayer and dedication for the work in which they are engaged. In the second place I hope that many who have found new life and health through the skill and devoted care of doctors will unite in prayer and thanksgiving for the blessings they have received.

A service of this nature is usually held in connection with the Medical Congress, and the Committee of the Cape Western Branch of the Medical Association of South Africa has welcomed the suggestion that such a service should be held in Cape Town on the same day as the service in Pretoria where the Medical Congress is meeting from 16 to 22 October.

Leading medical men are being invited to take part in the service and the Archbishop of Cape Town (the Most Rev. G. H. Clayton) will be the preacher.

I should be glad to reserve seats for doctors and any members of their families who would care to come, if they will let me know how many they require by Thursday, 13 October. A postcard addressed to me as above, or a telephone call to 6-8856 will be sufficient.

Leslie A. Davis
Rector

St. Stephen's Rectory
Pinelands
20 September 1955.

THE POLIO VACCINE

To the Editor: Dr. Gear's statement[1] in reply to my letter[2] in this *Journal* of 24 September 1955 is characterised by a complete failure to answer any one of the specific points which I raised. Indeed, I am reminded of Barnardo's remarks to Horatio (Hamlet, I, 1):

> '..... Sit down awhile,
> And let us once again assail your ears,
> That are so fortified against our story.'

(1) In the review[3] in this *Journal* of 3 September Turner stated: 'The lots were then inactivated by incubation with formalin solution at pH 7·0 and at 37°C for 10 days. In the earlier batches, following upon American advice, 1 in 4,000 formalin solution was used but in the later batches this has been replaced by 1 in 2,000. These monovalent lots were then stored with the formalin unneutralized at ice-box temperature for 2-3 months.'

There is a clear contradiction between the method of inactivation explicitly described by Turner and that implied by Dr. Gear, who refers only to 'longer exposure to 1 : 4,000 formalin under refrigeration .... followed by an exposure to 1 : 2,000 formalin for 3 days only.'

Dr. Turner has apparently described the South African inactivation procedure wrongly. By failing to set out precisely the complete method of inactivation which he employs, Dr. Gear has succeeded only in further confounding confusion. This information can only be furnished by Dr. Gear. It might make possible an assessment of the extent to which the South African vaccine may have been over-treated, in terms of the criteria defined by Salk.

(2) Dr. Turner stated that 'experimental evidence indicated that the increased exposure to a double concentration of formalin *would* not significantly alter the antigenicity of the vaccine' (italics inserted). I asked for the 'experimental evidence' on which this conclusion was based. Dr. Gear merely asserts: 'Vaccine suspensions subjected to *this* treatment retained their antigenicity' (italics inserted).

It is therefore clear that neither the experimental evidence for the claim, nor the methods of 'this treatment' have been disclosed.

(3) I stated that the 12 children inoculated with the South African vaccine appeared to have been injected with vaccine from earlier batches, i.e. before the inactivation procedure was modified. I also asked for the immunological status of these children before and after inoculation.

Dr. Gear has neither confirmed nor denied that only 12 children were tested at the material time. He has not disclosed how many were without antibodies before injection, nor whether these children received the earlier vaccine (which has not been issued to the public).

In my letter I indicated that if these children had in fact received vaccine from the batches subsequently discarded, no inference could be drawn about the antigenicity in children of the vaccine currently being distributed.

(4) I stated that no one knows at present what the long-term effects of inoculation with monkey kidney tissue may be. Turner quoted the improvement introduced by Polson and Van den Ende, who suggest the use of chloroform 'to remove the *greater part* of the foreign monkey kidney proteins' (italics inserted). It is clear therefore that the South African vaccine retains some monkey kidney proteins and neither Dr. Gear's experiment on animals nor his statement that kidney 'damage has not been produced in this way by anyone else either' counters the simple point I made that 'no one knows at present what the *long-term* effects of such stimulation may be'.

(5) I pointed out that the potential hazard from mass inoculation with penicillin of an entire generation of children (as distinct from the relatively few who receive penicillin for therapeutic purposes) creates a potential hazard for every child capable of being sensitized. As sensitization depends not on the quantity of the allergen but on the susceptibility of the individual, and as it is trite medicine that this may follow parenteral injection of minute amounts of the allergen, it becomes difficult to understand Dr. Gear's unsupported allegation that 'it is likely that many more children will be sensitized by therapeutic use of penicillin than from poliomyelitis vaccine'. Ringing the changes on the available antibiotics for future batches of vaccine does not eliminate the hazard of penicillin sensitization to those at present being inoculated. My point was that sensitization to penicillin by the vaccine would place at risk those susceptible individuals who might subsequently require penicillin in *therapeutic* doses for the treatment of other diseases. The increasing hazard of penicillin sensitization is dramatically illustrated by the report of yet another case in the column which appears cheek by jowl with Dr. Gear's letter.

Apart from these specific points which I raised and which have not been answered, Dr. Gear volunteers the interesting observation that it will never be possible to make a statistical evaluation of the efficacy of the South African vaccine in this country because the total number of European children under the age of 6 is less than the number required to obtain statistically significant results. This makes strange reading in the light of the review for lay consumption in the *Star* of 17 September 1955, in which 'Medicus' quotes the Director of the South African Poliomyelitis Foundation as stating that the 'poliomyelitis vaccine is 60% to 90% effective'. Apart from this and other equally incomprehensible assertions there are no published data which permit an independent scientific evaluation of the South African vaccine. The emotional appeal made by Dr. Gear to employ an unproved vaccine because it is the only one at present available for use in the Union is not one which can enjoy the endorsement of those who seek to practise medicine as a scientific discipline.

Maurice Shapiro

Sasbank Bldgs.
66 Market St.
Johannesburg
26 September 1955

1. Gear, J. (1955): S. Afr. Med. J., **29**, 923.
2. Shapiro, M. (1955): *Ibid.*, **29**, 922.
3. Turner, R. (1955): *Ibid.*, **29**, 833.

AN UNUSUAL CASE OF TWIN PREGNANCIES

To the Editor: Herewith a report of an unusual case of twin pregnancies which I had in my practice.

Mrs. M.S.O., aged 29 years, para 2, gravida 3 (1st child 4 years old, 2nd child 1½ years old, both normal confinements). L.M.P. on 3 October, 1954.

On 26 March, 1955 the patient had a sudden gush of blood-stained fluid *per vaginam*. She had no pain or discomfort. She was confined to bed and was given a pethidine injection. On abdominal examination the uterus was found to be of about 26 weeks' size, and not contracted or painful. Blood pressure, urine, heart and lungs normal.

There was a continual loss of blood-stained fluid *per vaginam* until 24 April, 1955, when labour started. Labour was very short and the patient was delivered of twin boys. The first twin was a face presentation and the amniotic bag ruptured just before birth; the infant was born alive, but died after 4½ hours.

The second twin had no bag of liquor amnii. It presented as a breech and was born dead. This baby was pale but not macerated. There were 2 separate placentas. The placenta and amniotic membranes of the first baby were normal and healthy. The placenta of the dead baby was ischaemic and the amniotic membranes shrivelled up. The puerperium was normal.

Here we have a case of twin pregnancy with 2 separate placentas and 2 separate amniotic bags. The top twin ruptured its amniotic bag and died, the liquor amnii draining away slowly. The irritation of this caused labour to set in only after 4 weeks. The second baby was ischaemic but not macerated; it must have died long after the loss of its liquor amnii.

Is it usual for labour only to start 4 weeks after the loss of the liquor amnii of one twin?

W. H. van Staden

P.O. Box 87
Nigel
Transvaal

A MEMORIAL FUND

To the Editor: Some while back, acting on a suggestion which I had made, a fund was inaugurated in memory of the late Dr. H. A. Moffat. Within recent months two outstanding medical personalities have passed away. I refer to the late Mr. Lindsay Sandes and Mr. Lionel Goldschmidt. The thought occurred to me that we, as a profession, should have financial sources available which would enable us to perpetuate the names of those of our colleagues who, by virtue of outstanding and distinguished service rendered to the profession, either in the academic sphere, or in the public activities of the Medical Association, deserve to be thus commemorated.

If a small voluntary levy were imposed on all members of the Association and the proceeds specifically donated to an *In Memoriam* fund, within a short while a substantial amount would be available to provide scholarships, prizes, etc. at the various medical schools in the Union.

The finer details of such a scheme, if acceptable, would have to be very carefully worked out. I commend the bare outline for consideration.

Jack Abelsohn

S. African Life Buildings
85 St. George's Street
Cape Town
20 September 1955.

MEDICAL SALARIES IN THE PUBLIC SERVICE

To the Editor: It was most perturbing to read in the local Press that at the recent meeting of the South African Medical and Dental Council in Cape Town the Secretary for Public Health, Dr. J. J. du Pré le Roux, should have recommended the importation of doctors from overseas to fill the vacant posts in the Public Health Department.

It was also most disturbing to see that he considered a commencing salary of £1,020 a year as adequate. Naturally only junior men will apply, but if they hope to make it a permanent career what inducement does the salary scale offer? One is prepared to accept a salary of £1,020 a year for a few years in a teaching hospital as a registrar to gain experience at the hands of expert teachers, and to fill the requirements to qualify for registration as a specialist.

Dr. M. Shapiro rightly pointed out the dangers to the profession of such importation, and the possible elimination of future bargaining power. He stressed that 'the only cure is to make those services attractive and pay reasonable salaries for them'. Dr. Braun put the matter clearly: 'Even though the posts were most attractive from the professional point of view, salaries in the State service were notoriously low'. Dr. A. Radford stated: 'The salaries being offered for Government jobs are less than those earned by artisans'. Mrs. C. Searle said, 'I am more and more perturbed at the tendency to regard the value of professional people in the medical services of the country as being so little'. She appealed to the Medical Council not to allow the importation of overseas medical practitioners to fill the posts.

As a junior practitioner I am debarred from accepting such a post in view of the low salary scale and in view of the fact that I contemplate marriage. Dr. Du Pré le Roux can hardly expect a married man to live on such a meagre salary. Only men with outside incomes can afford to accept such a post.

Let me assure the authorities that the vacancies would all be filled tomorrow if the salary scale was commensurate with the standard of work expected by the incumbents of office, and the standard of living such an incumbent should reasonably expect. Personally I am surprised that there are only 80 vacancies.

Junior Practitioner

Johannesburg
21 September 1955.

[The lowest grade is £1,020 per annum rising by annual increments of £60 to £1,380, plus (in the case of married men) a cost-of-living allowance of £234 per annum. Editor.]

CONSULTATIONS IN THE HOME

To the Editor: Many of us are saddened and distressed to see a new practice—an undesirable practice—arising in our midst. Practitioners in Cape Town are sending specialists to visit ill patients in the homes without accompanying them, and, often only after a short telephonic communication of a few symptoms and one or two signposts in the history. In many cases this attitude is due to the twin emotions of fear and anger—fear at losing the patient and anger at being pressed for a second opinion. In other cases it reflects a lack of interest. I am not referring to an emergency.

The specialist must live, and no one wishes to bite the hand that may feed him. Once he refuses he will never be forgiven—doctors have long memories!—and once he starts he dare not stop. In teaching hospitals we use the reference-card system but full notes are available, and generally two residents are present at the consultation. But, in private practice, where we piously invoke the words 'counsellor and friend' and boast of 'individual attention' and a warm 'doctor-patient relationship', are we fair to our patient in not being present at a consultation when he is sufficiently ill to be confined to bed?

Most reasonable men will agree that such an attitude, if persistently repeated, is deleterious to the patient. He should be examined *in consultation*, and his case should be thoroughly discussed at the *time of consultation*, with the general practitioner. The new approach vitiates the possible help the specialist may have to offer. Many young specialists are sad and frustrated, but what can the poor fellows do?

Another result is that the specialist, compelled to make his visit alone, may have to express opinions or give instructions direct to the patient or the relations. He may also become suspected of the 'domiciliary visiting' which the profession condemns.

Practitioners are demanding a consultants' register. Why not encourage this part of specialist practice which is purely consultative? In any case, is it ethical to put the sick patient between the hammer and the anvil?

We cannot all enter the Temple of Fame but we shall find a niche there if our fundamental consideration is the welfare of the patient and the peace of mind of the family.

Wolf Rabkin

National Mutual Buildings
Church Square
Cape Town
21 September 1955.